

ABSTRACTS OF WORKING PAPERS IN ECONOMICS

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Abel, Andrew B.

PD August 1997. **TI** The Mix and Scale of Factors with Irreversibility and Fixed Costs of Investment. **AU** Abel, Andrew B.; Eberly, Janice C. **AA** University of Pennsylvania National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6148; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 41. **PR** \$5.00. **JE** D24, E22, E23, L16, L23. **KW** Economic Fluctuations. Growth. Capital. Investment. Factors of Production.

AB When factors of production can be adjusted without cost, the mix of factors can be considered separately from their scale. We examine factor choice and utilization when investment is irreversible and subject to a fixed cost, so that the capital stock is a quasi-fixed factor that is adjusted infrequently and by discrete amounts. We derive and analyze analytic approximations for optimal investment behavior, and show how the quasi-fixity of capital eliminates the dichotomy between factor mix and scale. We show that the quasi-fixity of capital can give rise to labor hoarding, even when labor is a purely flexible factor.

Abowd, John M.

PD July 1997. **TI** Internal and External Labor Markets: An Analysis of Matched Longitudinal Employer-Employee Data. **AU** Abowd, John M.; Kramarz, Francis. **AA** Abowd: Cornell University and National Bureau of Economic Research. Kramarz: INSEE/CREST. **SR** National Bureau of Economic Research Working Paper: 6109; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 11. **PR** \$5.00. **JE** D21, J31. **KW** Labor Studies. Wages. France.

AB We decompose the real annual full time compensation costs of 1.1 million French workers followed over 12 years into a part that reflects their external opportunity wage and a part that reflects their internal wage rate. Using these components of compensation, we investigate the extent to which firm-size wage differentials and inter-industry wage differentials are due to variability in the external wage (person effects) versus variability in the internal wage (firm effects). For France, we find that most of the firm-size wage effect and most of the inter-industry wage effect is due to person effects-differences in the external wage rates.

PD July 1997. **TI** The Cost of Hiring and Separations. **AU** Abowd, John M.; Kramarz, Francis. **AA** Abowd: Cornell University and National Bureau of Economic Research. Kramarz: INSEE/CREST. **SR** National Bureau of Economic Research Working Paper: 6110; National Bureau of Economic

Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 19. **PR** \$5.00. **JE** J23, J26, J32, J63, M12. **KW** Labor Studies. Employment. Retirement. Job Separation. France.

AB In this article, we estimate the costs of hiring, separation, and retirement of employees for a representative sample of French establishments in 1992. The estimates are computed using data from three sources: the Wage Structure Survey (ESS), the Workforce Movement Questionnaire (DMMO), and the Occupational Structure Survey (ESE). We show that the estimated costs are, generally, asymmetric (hiring is cheaper than terminations), increasing, and concave functions of the number of entries or exits (either retirements or terminations). There is a fixed component to each of these costs that is related to the structure of the firm's personnel department. Our estimates imply that firms should not adjust gradually to the desired level of employment.

PD July 1997. **TI** Minimum Wages and Youth Employment in France and the United States. **AU** Abowd, John M.; Kramarz, Francis; Lemieux, Thomas; Margolis, David N. **AA** Abowd: Cornell University and National Bureau of Economic Research. Kramarz: INSEE/CREST. Lemieux: Universite de Montreal and National Bureau of Economic Research. Margolis: Universite de Paris. **SR** National Bureau of Economic Research Working Paper: 6111; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 44. **PR** \$5.00. **JE** J23, J31, J64. **KW** Labor Studies. Wages. Employment. Minimum Wage. France.

AB We use longitudinal individual wage and employment data for young people in France and the United States to investigate the effect of inter-temporal changes in an individual's status vis-a-vis the real minimum wage on employment transition rates. We find that movements in both French and American real minimum wages are associated with relatively important employment effects, and very strong effects on workers employed at the minimum wage. In the French case, albeit imprecisely estimated, a 1% increase in the real minimum wage decreases the employment probability of a young man currently employed at the minimum wage by 2.5%. In the United States, a decrease in the real minimum wage of 1% increases the probability that a young man employed at the minimum wage came from non-employment by 2.2%. These effects get worse with age in the United States, and are mitigated by eligibility for special employment promotion contracts in France.

Abrahamse, Allan F.

TI The Effects of a No-Pay/No-Play Plan on the Costs of Auto Insurance in Texas. **AU** Carroll, Stephen J.;

Abrahamse, Allan F.

Adams, James D.

PD July 1997. **TI** The Structure of Firm R&D and the Factor Intensity of Production. **AA** University of Florida and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6099; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 40. **PR** \$5.00. **JE** D21, J23, L23, L65, O32. **KW** Productivity. Research and Development. Knowledge Spillovers. Factor Intensity. Skill Bias.

AB This paper studies the influence of the structure of firm R&D, industry R&D spillovers, and plant level physical capital on the factor intensity of production. By the structure of firm R&D is meant its distribution across states and products. By factor intensity the authors mean the cost shares of variable factors. The authors characterize the effect of the structure of firm R&D on factor intensity using a Translog cost function with quasi-fixed factors. This cost function gives rise to a system of variable cost shares that depends on factor prices, firm and industry R&D, and physical capital. The authors find that total firm R&D, industry R&D spillovers, and plant level physical capital are factor biased towards labor as a whole, and factor saving in materials. All told, the findings suggest that skill bias is governed by portions of the firm's R&D program that are targeted on particular plants.

Adams, Kathleen

TI Physician Fee Policy and Medicaid Program Costs. **AU** Gruber, Jonathan; Adams, Kathleen; Newhouse, Joseph P.

Adda, Jerome

PD May 1997. **TI** Ballardurette and Juppette: A Discrete Analysis of Scrapping Subsidies. **AU** Adda, Jerome; Cooper, Russell. **AA** Adda: INRA, France. Cooper: Boston University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6048; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 37. **PR** \$5.00. **JE** E21, E62, E65, H20, L81. **KW** Economic Fluctuations. Growth. Automobile Industry. Subsidies. Durable Goods.

AB This paper studies the effects of subsidies on durable goods markets. In particular, the authors study a recent policy in France in which the governments of Balladur and Juppe subsidized the replacement of old cars with new ones. To study this policy, the authors construct a dynamic stochastic discrete choice model of car ownership at the household level. The resulting decision rules and equilibrium conditions are used to estimate, using aggregate data, the underlying parameters of the model. These policy functions are used to evaluate the short and long run effects of the French policies. The authors find that these policies do stimulate the automobile sector in the short run but, through the induced changes in the cross sectional distribution of car ages, create the basis for subsequent low activity. Further, while these policies increase government revenues in the short run, revenues in the long run are lower.

Agenor, Pierre-Richard

PD July 1997. **TI** Contagion and Volatility With Imperfect Credit Markets. **AU** Agenor, Pierre-Richard;

Aizenman, Joshua. **AA** Agenor: International Monetary Fund. Aizenman: Dartmouth College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6080; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** \$5.00. **JE** E32, F15, F34, F36. **KW** International Finance. Contagion. Credit Markets. Integration. Banking.

AB This paper interprets contagion effects as a perceived increase in the volatility of aggregate shocks impinging on the domestic economy. The implications of this approach are analyzed in a model with two types of credit market imperfections: domestic banks borrow at a premium on world capital markets, and domestic producers borrow at a premium from domestic banks. Financial intermediation spreads are shown to be determined by a markup that compensates for the expected cost of contract enforcement and state verification and for the expected revenue lost in adverse states of nature. Higher volatility of producers' productivity shocks increases both financial spreads and the producers' cost of capital, resulting in lower employment and higher incidence of default. The welfare effects of volatility are non-linear. Higher volatility does not impose any welfare cost for countries characterized by relatively low volatility and efficient financial intermediation.

Ahn, Dong-Hyun

PD September 1997. **TI** Optimal Risk Management Using Options. **AU** Ahn, Dong-Hyun; Boudoukh, Jacob; Richardson, Matthew; Whitelaw, Robert F. **AA** Ahn: University of North Carolina, Chapel Hill. Boudoukh and Whitelaw: New York University. Richardson: New York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6158; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** \$5.00. **JE** G13. **KW** Asset Pricing. Value at Risk. Options. Exercise Price. Hedging.

AB This paper addresses the question of how an institution might optimally manage the market risk of a given exposure. The authors provide an analytical approach to optimal risk management under the assumption that the institution wishes to minimize its Value-at-Risk (VaR) using options, and that the underlying exposure follows a geometric Brownian. The optimal solution specifies the VaR-minimizing level of moneyness of the option as a function of the asset's distribution, the risk-free rate, and the VaR hedging period. The authors find that the optimal strike of the put is independent of the level of expense the institution is willing to incur for its hedging program. Comparative static results show that the optimal strike price of these options is increasing in the asset's drift, decreasing in its volatility for most reasonable parameterizations, decreasing in the risk-free interest rate, and non-monotonic in the horizon of the hedge.

PD October 1997. **TI** Optimal Risk Management Using Options. **AU** Ahn, Dong-Hyun; Boudoukh, Jacob; Richardson, Matthew; Whitelaw, Robert F. **AA** Ahn: University of North Carolina, Chapel Hill. Boudoukh: New York University and Tel Aviv University. Richardson: New York University and National Bureau of Economic Research. Whitelaw: New York University. **SR** New York University, Salomon Center, Working Papers: S/97/32; Salomon Center, Stern School of Business, New York University, 44 West 4th

Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. PG 20. PR \$5.00 each; \$100.00 yearly subscription. JE G11, G13. KW Value at Risk. Risk Management. Options. Hedging.

AB See the abstract for Ahn, Dong-Hyun; Boudoukh, Jacob; Richardson, Matthew; Whitelaw, Robert F., Sept. 1977. "Optimal Risk Management Using Options". National Bureau of Economic Research Working Paper: 6158; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org.

Ait-Sahalia, Yacine

PD August 1997. TI Nonparametric Risk Management and Implied Risk Aversion. AU Ait-Sahalia, Yacine; Lo, Andrew W. AA Ait-Sahalia: University of Chicago and National Bureau of Economic Research. Lo: Massachusetts Institute of Technology and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6130; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 34. PR \$5.00. JE C14, G12, G13. KW Asset Pricing. Value at Risk. Economic Valuations. Contingent Pricing. Risk Aversion.

AB Typical value-at-risk (VaR) calculations involve the probabilities of extreme dollar losses, based on the statistical distributions of market prices. Such quantities do not account for the fact that the same dollar loss can have two very different economic valuations, depending on business conditions. The authors propose a non-parametric VaR measure that incorporates economic valuation according to the state-price density associated with the underlying price processes. The state-price density yields VaR values that are adjusted for risk aversion, time preferences, and other variations in economic valuation. In the context of a representative agent equilibrium model, the authors construct an estimator of the risk-aversion coefficient that is implied by the joint observations on the cross-section of option prices and time-series of underlying asset values.

Aizenman, Joshua

TI Contagion and Volatility With Imperfect Credit Markets. AU Agenor, Pierre-Richard; Aizenman, Joshua.

PD August 1997. TI Controlled Openness and Foreign Direct Investment. AU Aizenman, Joshua; Yi, Sang-Seung. AA Aizenman: Dartmouth College and National Bureau of Economic Research. Yi: Dartmouth College. SR National Bureau of Economic Research Working Paper: 6123; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 17. PR \$5.00. JE F13, F15, F21, O19, O23. KW International Trade. Foreign Direct Investment. Productivity. Policy Reform.

AB The purpose of this paper is to offer an explanation of why a developing country may adopt a partial reform under which foreign direct investments are controlled. The authors consider a country where the ruling elite (called "State capital") prevents the entry of Foreign capital and taxes the private sector before reform. The impetus to reform comes from an improved productivity of Foreign capital. The reform diminishes State capital's ability to tax the private sector but allows it to extract payment from Foreign capital for access to its markets. The authors show that a higher productivity of Foreign capital always increases the attractiveness of a partial

reform. In contrast, a higher productivity of Foreign capital can reduce the attractiveness of a full reform. The analysis implies that State capital's exercise of control over Foreign capital's inflow may be a necessary condition for the reform to take place at all.

Al-Najjar, Nabil I.

PD September 1998. TI A Reputational Model of Authority. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1223; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 37. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE D72, J41, L14. KW Authority. Reputation. Organization. Free Riding. Rent.

AB The paper provides a model where authority relationships are founded on reputation. The viability of authority is the result of subordinates' free-riding on each other challenges, reducing the frequency of challenges, and making reputation worth defending. The party with authority secures subordinates' compliance through the payment of rents to influence the extent of their failure to act collectively and exacerbate the free-rider problem they face. The model provides a framework to explain how the magnitude and form of these rents depend on the primitives of the environment and on the authority's design of its reputation. Applications to efficiency wages, dictatorships, and the notion of legitimacy are considered.

Alesina, Alberto

PD September 1997. TI Economic Integration and Political Disintegration. AU Alesina, Alberto; Spolaore, Enrico; Wacziarg, Romain. AA Alesina: Harvard University and National Bureau of Economic Research. Spolaore: Ohio State University. Wacziarg: Harvard University. SR National Bureau of Economic Research Working Paper: 6163; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 39. PR \$5.00. JE F13, F15, F43. KW Economic Integration. Trade Liberalization. International Finance. International Trade. Investment.

AB Trade liberalization and political separatism go hand in hand. In a world of trade restrictions, large countries enjoy economic benefits because political boundaries determine the size of the market. In a world of free trade and global markets even relatively small cultural, linguistic or ethnic groups can benefit from forming small and homogeneous political jurisdictions that trade peacefully and are economically integrated with others. This paper provides a formal model of the relationship between openness and the equilibrium number and size of countries, and successfully tests two implications of the model. The first one is that the economic benefits of country size depend on and are mediated by the degree of openness to trade. The second is that the history of Nation-State creations and secessions is influenced by the trade regime.

Allen, Robert C.

PD April 1998. TI Paying for University Education in B.C. AA University of British Columbia. SR University of British Columbia, Department of Economics Discussion

Paper: 98/07; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1, Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. PG 72. PR 30 cents per page U.S. and Canada, 40 cents per page International. JE H20, I22. KW Canada. Post-Secondary Education. Educational Finance.

AB This paper analyzes the widely held view that university students are heavily subsidized because tuition amounts to only 15% of the cost of their education's. I argue that students, in fact, pay the full costs of their education. They pay in two ways -- with tuition fees while they are students and through higher taxes after they graduate. The latter payments are ignored in conventional thinking. The costs of undergraduate education are computed. Pretax returns to education are computed from the 1991 census. Taxes are computed from an estimated tax function, so the returns to the treasury and the student can be calculated. Ability bias is investigated with an instrumental variables procedure.

PD August 1998. **TI** The Great Divergence: Wages and Prices in Europe from the Middle Ages to the First World War. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 98/12; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1, Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. PG 79. PR 30 cents per page U.S. and Canada, 40 cents per page International. JE J30, N13, N33, O47. KW Wages. Convergence. Europe. Economic History.

AB This paper traces the history of prices and wages in European cities from the fourteenth century to the First World War. It is shown that the divergence in real incomes observed in the mid-nineteenth century was produced between 1500 and 1750 as incomes fell in most European cities but were maintained (not increased) in the economic leaders.

PD August 1998. **TI** The Employability of University Graduates in the Humanities, Social Sciences, and Education: Recent Statistical Evidence. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 98/15; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1, Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. PG 60. PR 30 cents per page U.S. and Canada, 40 cents per page International. JE I21, J24, J31, J64. KW Wages. Unemployment. University Education. Returns to Education.

AB The paper analyzes the employment experience of people with different levels and types of education between 1970 and 1995. Particular attention is given humanities, social science, and education graduates. They do well when success is measured in terms of unemployment, earnings, and the social rate of return to their programs.

PD September 1998. **TI** Agricultural Output and Productivity in Europe, 1300-1800. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 98/14; Department of Economics, University of British Columbia, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1, Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. PG 45. PR 30 cents per page U.S. and Canada, 40 cents per page International. JE N13, N33, N53. KW Economic History.

Europe. Agriculture. Structural Change.

AB Estimates of the employment structure, agricultural output, and agricultural labor productivity are developed for the leading European countries from 1300 to 1800. The employment estimates are developed from estimates of the total, urban, and rural populations. The output estimates are derived by positing a demand curve for agricultural goods.

PD November 1998. **TI** Tracking the Agricultural Revolution. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 98/18; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C., V6T 1Z1, Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. PG 65. PR 30 cents per page U.S. and Canada, 40 cents per page International. JE N53, O13, Q15, Q16. KW Agricultural Productivity. Agricultural Revolution. England. Economic History.

AB The timing of the English agricultural revolution is investigated with three indicators: output growth implied by a demand curve, crop yields calculated from probate inventories, and productivity as indicated by real rents. All three indicators imply that the agricultural revolution took place between 1600 and 1750 rather than between 1750 and 1800. These findings contradict the classic interpretation, which assigns the agricultural revolution to the period of parliamentary enclosures in the last half of the eighteenth century, and, instead, support the view that small scale, open field farmers were responsible for rising output and productivity from 1600 to 1750.

PD November 1998. **TI** Urban Development & Agrarian Change in Early Modern Europe. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 98/19; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1, Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. PG not available. PR 30 cents per page U.S. and Canada, 40 cents per page International. JE K11, N33, N53, Q15, Q16. KW Agricultural Productivity. Serfdom. Land Tenure. Property Rights.

AB The paper assesses the view that peculiarly English institutions (enclosures and capitalist agriculture) were particularly conducive to agricultural development. European-wide productivity indices show that England, the Netherlands, and Belgium had unusually productive agricultures in the eighteenth century. Since they did not share common tenurial institutions that distinguished them from the rest of Europe, such institutions do not explain agricultural revolutions. What the three countries had in common and what set them apart from others was higher rates of urbanization and higher levels of wages. Tight labor markets explain high agricultural productivity and institutional changes like enclosure and large farms.

Altman, Edward I.

PD December 1997. **TI** Default Rates in the Syndicated Bank Loan Market: A Mortality Analysis. **AU** Altman, Edward I.; Suggitt, Heather J. **AA** Altman: New York University. Suggitt: Credit Suisse First Boston. **SR** New York University, Salomon Center, Working Papers: S/97/39; Salomon Center, Stern School of Business, New York

University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. **PG** 27. **PR** \$5.00 each; \$100.00 yearly subscription. **JE** G11, G12, G21, G32. **KW** Default. Migration Patterns. Bank Loans. Corporate Bonds.

AB The most fundamental aspect of credit risk models is the rating of the underlying assets and the associated expected and unexpected migration patterns. The most important migration is to default. While default rate empirical studies of corporate bonds are commonplace, there has never been a study on the corporate bank loan market. This paper assesses the default rate experience on large, syndicated bank loans. The results are stratified by original loan rating using a mortality rate framework for the 1991-1996 period. The authors find that the mortality rates on bank loans are remarkably similar to that of corporate bonds and assess the bias in the magnitude of their findings given that the study period covered a benign credit cycle in the United States. Their results provide important new information for assessing the risk of corporate loans not only for bankers but also mutual fund investors and analysts.

PD January 1998. **TI** Defaults and Returns on High Yield Bonds: Analysis Through 1997. **AU** Altman, Edward I.; Kishore, Vellore M. **AA** New York University. **SR** New York University, Salomon Center, Working Papers: S/98/01; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. **PG** 10. **PR** \$5.00 each; \$100.00 yearly subscription. **JE** G12, G13, G20. **KW** Default. Bonds. Fixed Income Securities. High Yield Debt.

AB Nineteen-ninety seven was an excellent year for the high yield bond market with record new issuance, continued low defaults and returns of almost 13%. When viewed based on relative returns from other fixed income securities markets, however, the high yield debt market's performance in 1997 was about average with a return spread over 10-year U.S. Treasuries of less than 2%, slightly below the historic average. This report documents the high yield debt market's risk and return performance by presenting default and mortality statistics and providing a matrix of average returns and other performance statistics over the relevant periods of the market's evolution. The analysis covers the period 1971-1997 for defaults and 1978-1997 for returns. Two other reports, published by NYU Salomon Center, comprehensively document the performance of defaulted public bonds and bank loans and the default rate experience on syndicated bank loans.

PD January 1998. **TI** The Investment Performance of Defaulted Bonds and Bank Loans: 1987- 1997 and Market Outlook. **AU** Altman, Edward I.; Saxman, M. Christian. **AA** New York University. **SR** New York University, Salomon Center, Working Papers: S/98/02; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. **PG** 11. **PR** \$5.00 each; \$100.00 yearly subscription. **JE** G12, G19, G21, G24. **KW** Default. Bank Loans. Bonds. Investment Performance.

AB This report presents the results and discussion of the investment performance of those bonds and bank loans that have defaulted on their scheduled payments to creditors and continue trading in the public market while the issuing firm attempts a financial reorganization. Monthly total return measures are compiled based on the Altman-NYU Salomon Center Indexes for Defaulted Bonds and Defaulted Bank Loans

and compared to the total returns of common stocks and high yield bonds. Returns are based on the market weighted indexes and presented for the past year (1997) as well as for the last eleven years (for bonds) and two years for bank loans.

Anand, Krishnan S.

PD July 1998. **TI** Postponement and Information in a Supply Chain. **AU** Anand, Krishnan S.; Mendelson, Haim. **AA** Anand: Northwestern University. Mendelson: Stanford University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1222; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 28. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D23, D24, L15, L23, M11. **KW** Postponement. Supply Chains. Product Differentiation. Uncertainty.

AB We model a supply chain consisting of a production facility, a distribution center and two differentiated markets. Demand information is used to mitigate the effects of uncertainty in the output markets. We study the firm's operational performance under alternative business processes, comparing early and delayed product differentiation. The comparison yields the value of postponement. Our results show that informational considerations have a paramount effect on the effectiveness of postponement strategies. They enable researchers and decision-makers to perform cost-benefit analyses and quantify the anticipated effects of implementing postponement strategies. They also provide qualitative guidance regarding factors that affect the value of postponement.

Ando, Amy Whritenour

PD July 1997. **TI** Delay on the Path to the Endangered Species List: Do Costs and Benefits Matter? **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 97/43; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 37. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** C41, D78, K32, Q28. **KW** Endangered Species. Political Economy. Duration Analysis. Cost-Benefit Analysis.

AB This paper explores factors that influence bureaucratic delay by conducting a duration-time analysis of additions to the Endangered Species List by the Fish and Wildlife Service. Using data from 1989- 1994, it finds that important members of Congress do influence the pace with which a species moves toward being listed for protection, and this influence is consistent with the desires of their constituents. Private interest groups can also affect a species' wait for protection by submitting petitions, comments, and hearing requests. The results confirm that endangered-species listing decisions are not immune to cost-benefit considerations.

PD July 1997. **TI** Interest-Group Behavior and the Endangered Species Act. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 97/44; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 36. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** D72, Q28. **KW** Endangered Species.

Interest Groups. Economies of Scale. Cost- Benefit Analysis. Political Economy.

AB This paper analyzes the factors that influence the intensity of interest-group pressure in response to proposals to add species to the list of those protected under the Endangered Species Act. It finds that opposition and support seem to rise with the costs and benefits groups might expect to experience as a result of a listing, though support is invariant to some species characteristics thought to be most important by scientists. To the extent that interest-group influence affects the listing process, these findings imply that some costs and benefits are injected into the process, though not, perhaps, in an ideal fashion. The paper also finds that multi-species proposals may exploit economies of scale in species protection, and do not attract any more support than do proposals to protect individual species. This implies that our biodiversity-protection policy might most appropriately be redefined in terms of ecosystems rather than individual species.

Andrade, Gregor

PD August 1997. **TI** How Costly is Financial (Not Economic) Distress? Evidence from Highly Leveraged Transactions that Became Distressed. **AU** Andrade, Gregor; Kaplan, Steven N. **AA** Andrade: University of Chicago. Kaplan: University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6145; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** G32, G33, G34. **KW** Corporate Finance. Leveraged Transactions. Financial Distress.

AB This paper studies thirty-one leveraged transactions (HLTs) of the 1980's that subsequently became financially distressed. At the time of distress, all sample firms have operating margins that are positive. Therefore, the authors consider these firms financially distressed, not economically distressed. The net effect of the HLT and financial distress is a slight increase in value. This finding strongly suggests that, overall, the HLTs of the late 1980's succeeded in creating value. The authors also present quantitative and qualitative estimates of the (direct and indirect) costs of financial distress and their determinants. Operating margins of the distressed firms increase immediately after the HLT, decline when the firms become distressed and while they are distressed, but then rebound after the distress is resolved. Consistent with some costs of financial distress, the authors find evidence of unexpected cuts in capital expenditures, undesired asset sales, and costly managerial delay in restructuring.

Andres, Javier

PD June 1997. **TI** Does Inflation Harm Economic Growth? Evidence for the OECD. **AU** Andres, Javier; Hernando, Ignacio. **AA** Andres: Universitat de Valencia, Spain. Hernando: Banco de Espana, Spain. **SR** National Bureau of Economic Research Working Paper: 6062; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** \$5.00. **JE** E31, F43, O49. **KW** Monetary Economics. Growth. Inflation. Convergence.

AB The purpose of this paper is to study the correlation among growth and inflation at the OECD level, within the framework of the so-called convergence equations, and to discuss whether this correlation withstands a number of

improvements in the empirical models, which try to address the most common criticisms of this evidence. The main findings are the following: 1) the negative correlation among growth and inflation is not explained by the experience of high-inflation economies; 2) the estimated costs of inflation are still significant once country-specific effects are allowed for in the empirical model; and 3) the observed correlation cannot be dismissed on the grounds of reverse causation (from GDP to inflation).

Andrews, Donald W. K.

PD September 1998. **TI** Evaluation of a Three-Step Method of Choosing the Number of Bootstrap Repetition. **AU** Andrews, Donald W. K.; Buchinsky, Moshe. **AA** Andrews: Yale University. Buchinsky: Brown University. **SR** Brown University, Department of Economics Working Paper: 98/17; Department of Economics, Box B, Brown University, Providence, RI 02912. **PG** 36. **PR** no charge. **JE** C12, C13, C14, C15. **KW** Bootstrap. Excess Kurtosis. Confidence Intervals. Density Estimation. Simulation Methods.

AB This paper provides a variety of Monte Carlo simulations that evaluate the three-step method of Andrews and Buchinsky (1998) for choosing the number of bootstrap repetitions B . The simulations cover bootstrap standard errors, confidence intervals, tests, and p-values. Three models commonly used in econometric applications are considered: linear regression, binary probit, and quantile regression. The simulations reported here assess the extent to which the three-step method attains the desired level of accuracy in finite samples. Accuracy is measured by the percentage deviation of the bootstrap standard error estimate, confidence interval length, test's critical value, or test's p-value based on B bootstrap simulations from the corresponding ideal bootstrap quantities for which $B = \infty$. The authors find that the three-step method works very well in many contexts. They also find that the numbers of bootstrap repetitions commonly used in econometric applications is less than the numbers needed for accuracy.

Arreaza, Adriana

PD December 1997. **TI** Consumption Smoothing through Fiscal Policy in OECD and EU Countries. **AU** Arreaza, Adriana; Sorensen, Bent E.; Yosha, Oved. **AA** Arreaza and Sorensen: Brown University. Yosha: Tel-Aviv University. **SR** Brown University, Department of Economics Working Paper: 97/29; Department of Economics, Box B, Brown University, Providence, RI 02912. **PG** 34. **PR** no charge. **JE** E21, E61, E62, F15, G15. **KW** Fiscal Institutions. Government Deficits. Income Insurance. Capital Markets. Economic Integration.

AB We measure the amount of smoothing achieved through various components of the government deficit in EU and OECD countries. For EU countries, at the one year frequency, thirteen percent of shocks to GDP are smoothed via government consumption, eighteen percent via transfers, five percent via subsidies, while taxes provide no smoothing. The results for OECD countries are similar. Government transfers provide more smoothing of negative than of positive shocks among EU countries. There seems to be no trade-off between high government deficits in a country and the ability to smooth consumption. We find that in countries where there is "delegation" of power or fiscal targets are negotiated effectively by coalition members, consumption smoothing via government

consumption and government transfers is considerably higher. We interpret this finding as evidence that effective budgetary institutions can accomplish efficient consumption smoothing via government deficit spending and lower average deficits.

Ashenfelter, Orley

PD July 1997. **TI** Income, Schooling, and Ability: Evidence From a New Sample of Identical Twins. **AU** Ashenfelter, Orley; Rouse, Cecilia. **AA** Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6106; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** I21, J13, J24, J31. **KW** Children. Labor Studies. Education. Twins. Returns to Schooling.

AB The authors develop a model of optimal schooling investments and estimate it using new data on approximately 700 identical twins. They estimate an average return to schooling of 9 percent for identical twins, but estimated returns appear to be slightly higher for less able individuals. Simple cross-section estimates are marginally upward biased. These empirical results imply that more able individuals attain more schooling because they face lower marginal costs of schooling, not because of higher marginal benefits.

Auerbach, Alan J.

PD August 1997. **TI** Quantifying the Current U.S. Fiscal Imbalance. **AA** University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6119; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 15. **PR** \$5.00. **JE** H50, H62, H63. **KW** Public Economics. Debt. Deficits. Government Spending.

AB This paper considers the magnitude of the United States fiscal imbalance, as measured by the permanent changes needed to stabilize the national debt as a share of GDP. At present, even after recent improvements in forecast deficits, this imbalance stands at 5.3 percent of GDP -- several times the magnitude of the current official deficit. The imbalance is due primarily to the growth of Medicare, Medicaid, and Social Security. Addressing an imbalance of this size will require significant policy changes. Even if current projected reductions in other government spending occur, and policies are adopted to eliminate the estimated OASDI imbalance and balance the federal budget in 2002, an additional and immediate reduction in the primary deficit of 2.7 percent of GDP will be required to establish a feasible fiscal policy. Waiting to adopt policy changes will increase the size of the required annual primary deficit reduction.

Austin, David H.

PD May 1997. **TI** Efficiency and Political Economy of Pollution Control with Ancillary Benefits: An Application to NOx Control in the Chesapeake Bay Airshed. **AU** Austin, David H.; Krupnick, Alan J.; McConnell, Virginia D. **AA** Austin and Krupnick: Resources for the Future. McConnell: University of Maryland and Resources for the Future. **SR** Resources for the Future Discussion Paper: 97/34; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 12. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00

First Class, \$6.00 Book Rate. **JE** D61, D63, H23, Q25. **KW** Pollution Control. Ancillary Benefits. Cross-Media Pollution. Regional Distribution.

AB This paper examines implications for cost-effective allocation of pollution controls when preferences of coalitions organized along regional lines, or according to preferences for air vs. water quality improvements, are accounted for. Results are compared to a base case in which NOx emissions reductions must satisfy only a water quality standard, and total costs are minimized over emissions sources. Relative to the base-case result that marginal control costs must be equal across sources, stronger relative preferences for air imply shifting of control toward sources that produce greater ancillary benefits to air quality. Regional differences may require side payments to induce cooperation where benefits are low, but this will not affect how controls themselves should be allocated.

TI The Costs and Benefits of Reducing Acid Rain. **AU** Burtraw, Dallas; Krupnick, Alan J.; Mansur, Erin; Austin, David H.; Farrell, Deirdre.

TI The Costs and Benefits of Reducing Acid Rain. **AU** Burtraw, Dallas; Krupnick, Alan J.; Mansur, Erin; Austin, David H.; Farrell, Deirdre.

Backus, David

PD November 1997. **TI** Accounting for Biases in Black-Scholes. **AU** Backus, David; Foresi, Silverio; Li, Kai; Wu, Liuren. **AA** Backus: New York University and National Bureau of Economic Research. Foresi: Salomon Brothers Inc. Li and Wu: New York University. **SR** New York University, Salomon Center, Working Papers: S/97/34; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. **PG** 40. **PR** \$5.00 each; \$100.00 yearly subscription. **JE** C14, F31, G12, G13. **KW** Currency Options. Skewness. Kurtosis. Gram-Charlier Expansions. Implied Volatility.

AB Prices of currency options commonly differ from the Black-Scholes formula along two dimensions: implied volatilities vary by strike price (volatility smiles) and maturity (implied volatility of at-the-money options increases, on average, with maturity). We account for both using Gram-Charlier expansions to approximate the conditional distribution of the logarithm of the price of the underlying security. In this setting, volatility is approximately a quadratic function of moneyness, a result we use to infer skewness and kurtosis from volatility smiles. Evidence suggests that both kurtosis in currency prices and biases in Black-Scholes option prices decline with maturity.

PD December 1997. **TI** Predictable Changes in Yields and Forward Rates. **AU** Backus, David; Foresi, Silverio; Mozumdar, Abon; Wu, Liuren. **AA** Backus: New York University and National Bureau of Economic Research. Foresi: Salomon Smith Barney. Mozumdar: Virginia Tech University. Wu: New York University. **SR** New York University, Salomon Center, Working Papers: S/97/35; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. **PG** 43. **PR** \$5.00 each; \$100.00 yearly subscription. **JE** E43, G12. **KW** Expectations Hypothesis. Term Premiums. Pricing Kernels. Forecasting. Affine Models.

AB We consider patterns in the predictability of interest

rates, characterized relative to the expectations hypothesis (EH), and attempt to account for them with affine models. We make the following points: (i) Discrepancies in the data from the EH take a particularly simple form with forward rates: as theory suggests, the largest discrepancies are at short maturities. (ii) Reasonable estimates of one-factor Cox-Ingersoll-Ross models imply regressions on the opposite side of the EH than we see in the data: regression slopes are greater than one, not less than one. (iii) Multifactor affine models can nevertheless approximate both departures from the EH and other properties of interest rates.

Bagwell, Kyle

PD May 1997. **TI** An Economic Theory of GATT. **AU** Bagwell, Kyle; Staiger, Robert W. **AA** Bagwell: Columbia University. Staiger: Center for Advanced Study in the Behavioral Sciences and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6049; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **Website:** www.nber.org. **PG** not available. **PR** \$5.00. **JE** F02, F13, F15, F41, F42. **KW** International Trade. Investment. Trade Agreements. GATT. Reciprocity.

AB Despite the important role played by GATT in the world economy, economists have not developed a unified theoretical framework that interprets and evaluates the principles that form the foundation of GATT. Our purpose here is to propose such a framework. Working within a general equilibrium trade model, we represent government preferences with a very general formulation that includes all the major political-economy models of trade policy as special cases. Using this general framework we establish three key results. First, GATT's principle of reciprocity can be viewed as a mechanism for implementing efficient trade agreements. Second, through the principle of reciprocity countries can implement efficient trade agreements if and only if they also abide by the principle of nondiscrimination. And third, preferential agreements undermine GATT's ability to deliver efficient multilateral outcomes through the principle of reciprocity, unless these agreements take the form of customs unions among partners that are sufficiently similar.

Balduzzi, Pierluigi

TI The Impact of Predictability and Transaction Costs on Portfolio Choice in a Multiperiod Setting. **AU** Lynch, Anthony W.; Balduzzi, Pierluigi.

PD October 1997. **TI** Economic News and the Yield Curve: Evidence from the U.S. Treasury Market. **AU** Balduzzi, Pierluigi; Elton, Edwin J.; Green, T. Clifton. **AA** Balduzzi: Boston College. Elton and Green: New York University. **SR** New York University, Salomon Center, Working Papers: S/98/05; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **Website:** www.stern.nyu.edu/salomon. **PG** 30. **PR** \$5.00 each; \$100.00 yearly subscription. **JE** G12, G13, G14. **KW** Announcements. Trading Volume. Bid Ask Spreads. Bonds. Treasury Market.

AB This paper examines newly-available intra-day data from the inter-dealer government bond market to investigate the effects of economic-news announcements on prices, trading volume, and bid-ask spreads. The use of intra-day price data together with data on market expectations provides new and

different results relative to previous studies. The authors find a total of seventeen economic announcements to have a significant impact on the price of at least one of the following instruments: a three-month bill, a two- and ten-year note, and a thirty-year bond. Ten of them significantly affect all note and bond prices. For announcements that have a significant impact on prices, the impact occurs within one minute after the announcement. Interestingly, only three announcements affect the bill price. This suggests that at least two factors of uncertainty are needed to model the yield curve. For the ten-year note a strong association between announcements and trading volume is found.

Baliga, Sandeep

PD August 1997. **TI** Not Invented Here. **AU** Baliga, Sandeep; Sjostrom, Tomas. **AA** Baliga: Northwestern University. Sjostrom: Harvard University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1213; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. **Website:** www.kellogg.nwu.edu/research/math. **PG** 28. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D23, D82, J50. **KW** Peer Review. Self Assessment. Renegotiation. Private Information.

AB The authors consider the problem of inducing agents who are concerned with their careers to reveal their private information about a project which has originated with one of them. A successful project raises the inventor's chance of promotion, at his peer's expense. Thus, the peer has an incentive to promote the inventor's bad project to see him fail, but to denigrate his most promising projects. Moreover, there is an incentive for junior workers to push their own work no matter what the perceived quality is, but an incentive for senior workers to suppress their own ideas. In case of disagreement among the agents, the optimal policy is to promote the agent who is more likely to have been truthful, not necessarily the one most suitable for promotion. This policy is not renegotiation proof. Within the class of renegotiation-proof mechanisms, self assessment is always optimal.

PD February 1998. **TI** Decentralization and Collusion. **AU** Baliga, Sandeep; Sjostrom, Tomas. **AA** Baliga: Northwestern University. Sjostrom: Harvard University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1210; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. **Website:** www.kellogg.nwu.edu/research/math. **PG** 32. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C72, D23, D82, L23. **KW** Decentralization. Collusion. Message Games. Asymmetric Information. Agency Problems.

AB We consider a model where agents work in sequence on a project, share information not available to the principal, and can collude. Due to limited liability the Coase theorem does not apply. The distribution of surplus among the agents is therefore an important control variable for the principal, which gives us a theory of how to delegate in an organization subject to moral hazard. The optimal distribution of surplus can always be

achieved by delegating in the right way (decentralization) without using "message games" (centralization).

PD July 1998. **TI** Banks Versus Bonds: The Emergence and Persistence of Two Financial Systems. **AU** Baliga, Sandeep; Polak, Ben. **AA** Baliga: Northwestern University. Polak: Yale University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1221; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 34. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D82, G21, G32, N20. **KW** Monitoring. Traded Debt. Financial Institutions. Industrialization. Free Entry.

AB We use a simple graphical moral hazard model to compare monitored (non-traded) bank loans versus traded (non-monitored) bonds as sources of external funds for industry. We contrast the conditions that theoretically favor each system, such as the size and number of firms, with conditions prevailing when these financial systems evolved during the British and German industrial revolutions. Then, to address why different systems have persisted, we consider a larger model with entry so that firm size and number are endogenous. We show that multiple equilibria can exist if financiers take the industrial structure as given and vice versa, and we compare these equilibria in welfare terms. Finally, we argue that with, if bilateral coordination is possible, Anglo-Saxon style finance systems can only persist if they are efficient, but an economy can get stuck in an inefficient German style system.

Ball, Laurence

PD June 1998. **TI** Expectations and the Effects of Monetary Policy. **AU** Ball, Laurence; Croushore, Dean. **AA** Ball: John Hopkins University. Croushore: Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 98/13; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. **PG** 18. **PR** no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** D84, E31, E52. **KW** Monetary Policy. Expectations. Federal Funds Rate. Inflation.

AB This paper examines the predictive power of shifts in monetary policy, as measured by changes in the real federal funds rate, for output, inflation, and survey expectations of these variables. We find that policy shifts have larger effects on actual output than on expected output, suggesting that agents underestimate the effects of policy on aggregate demand. Our results help to explain the real effects of monetary policy, and they provide negative evidence on the rationality of expectations.

Ballester, Marta

PD November 1997. **TI** Individual-Firm Style Loadings, Unrecorded Economic Assets and Systematic Risk. **AU** Ballester, Marta; Livnat, Joshua; Seethamaraju, Chandrakanth. **AA** Ballester: University of Malaga, Spain. Livnat and Seethamaraju: New York University. **SR** New York University, Salomon Center, Working Papers: S/97/27;

Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. **PG** 33. **PR** \$5.00 each; \$100.00 yearly subscription. **JE** D23, G11, G31, G32, L20. **KW** Loadings. Growth Firms. Value Firms. Systematic Risk.

AB This study estimates individual-firm style loadings for classification of individual securities into growth (glamour) and value groups. It examines this classification by estimating the extent of unrecorded economic assets for growth and value firms. The study also examines the systematic-risk characteristics associated with this classification. Using Ohlson's (1995) valuation model, this study estimates the persistence of abnormal earnings for individual firms using time-series analysis. Growth firms are shown to have higher levels of abnormal earnings persistence than value firms, probably due to the greater levels of unrecorded economic assets than value firms. Indeed, the study finds that growth firms have greater levels of R&D and advertising intensity than value firms. The study also shows that growth and value firms differ in their systematic risk. Possibly due to the greater uncertainty associated with unrecorded economic assets, the systematic risks of growth firms are larger than those of value firms.

Bansak, Cynthia

PD June 1998. **TI** Have Employment Relationships in the United States Become Less Stable? **AU** Bansak, Cynthia; Raphael, Steven. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 98/15; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 20. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** J63. **KW** Employment Stability. Labor Turnover. Job Separation.

AB There has been considerable debate as to whether job stability has declined in the United States. This paper uses data from the Survey of Income and Program Participation (SIPP) to examine the incidence of labor market turnover between 1986 and 1993. Specifically, we calculate one- and two-year separation rates and then analyze turnover by the source of separation. We find that the incidence of job separations did not increase over the period under investigation, but appears to have declined somewhat. The only deviation from this overall trend occurs for workers between 56 and 65 years of age who experienced increased separation rates. When analyzing separations by reason, we find a decrease in voluntary inter-firm mobility from 1986 to 1992 with a slight upturn in 1993 and no clear pattern for involuntary separations. Therefore, we do not find conclusive evidence that employment relationships have become more unstable in the recent past.

Barisone, Giacomo M.

PD December 1997. **TI** Fiscal Policy, Debt and Coalition Behaviour: Theory and Evidence from Italy. **AA** University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 97/14; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. Website: www.ex.ac.uk/~BPEARSON/Research/DiscussionPapersEcon/DiscussionPapers.html. **PG** 24. **PR** no charge. **JE** E61, E62, H10, H30, H63. **KW** Business Cycles. Fiscal

Policy. Public Debt. Structural Breaks. Coalitions.

AB This paper presents a structural model of optimal fiscal policy in a multi-party system, which allows for the existence of coalition governments. The paper shows how political effects weaken stabilizing feedback rules from inherited public debt to the current policy instruments of government expenditure, taxes and debt. It also yields new predictions about how debt contingent feedback rules may depend on partisan, electoral and type of government effects. These new predictions are supported by a test of the model on Italian data.

PD November 1998. **TI** Testing the Tax Smoothing Hypothesis of Fiscal Policy: Some Evidence from Italy. **AA** University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 98/13; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. Website: www.ex.ac.uk/~BPEARSON/Research/DiscussionPapers/Econ/DiscussionPapers.html. **PG** 22. **PR** no charge. **JE** E61, E62, H21, H61. **KW** Fiscal Policy. Tax Smoothing. Taxation. Budget.

AB This paper tests Barro's (1979) tax smoothing model of fiscal policy. The model implies that budget deficits and surpluses are used optimally to minimize the distortionary effects of taxation, given a certain path of spending. The theory has a number of implications both for the statistical time series properties of government budget data and for causality amongst these variables. These implications are derived and tested on a vector autoregression model using annual data for Italy covering the period from 1861 to 1996. The empirical results partially support the tax-smoothing hypothesis for the full sample. However, when we consider the post World War II period, all of the tests clearly reject the tax-smoothing hypothesis.

Baron, David P.

PD April 1998. **TI** Dynamics of Parliamentary Systems: Selections, Governments, and Parliaments. **AU** Baron, David P.; Diermeier, Daniel. **AA** Baron: Stanford University. Diermeier: Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1215; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 52. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D72, H11. **KW** Parliamentary Systems. Electoral Systems. Government Formation. Elections.

AB This paper presents a theory of parliamentary systems that incorporates electoral, government formation, and legislative institutions and focuses on the strategic opportunities inherent in those institutions. The electoral system is proportional representation, and a party is selected as formateur based on its representation in parliament. Parties are assumed to be unable to commit credibly to the policies they will implement once in government. Since the policy chosen by a government in one period becomes the status quo for the next period, a current government can strategically position the status quo to affect both the outcome of the next election and subsequent government formation. When parties have both policy and officeholding preferences, elections are not moderating; i.e., they do not contribute to policy centrality or

stability. Policies can be outside the Pareto set, and governments as well as policies change with each election. Those governments are formed by minimal winning coalitions.

Bauer, Paul W.

PD October 1997. **TI** Consistency Conditions for Regulatory Analysis of Financial Institutions: A Comparison of Frontier Efficiency Methods. **AU** Bauer, Paul W.; Berger, Allen N.; Ferrier, Gary D.; Humphrey, David B. **AA** Bauer: Federal Reserve Bank of Cleveland. Berger: Board of Governors of the Federal Reserve System and Wharton Financial Institutions Center. Ferrier: University of Arkansas. Humphrey: Florida State University. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/50; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 30. **PR** no charge. **JE** E58, G21, G28. **KW** Financial Institutions. Efficiency. Regulation. Banking. Frontier Efficiency.

AB We propose a set of consistency conditions that frontier efficiency measures should meet to be most useful for regulatory analysis or other purposes. The efficiency estimates should be consistent in their efficiency levels, rankings, and identification of best and worst firms, consistent over time and with competitive conditions in the market, and consistent with standard nonfrontier measures of performance. We provide evidence on these conditions by evaluating and comparing efficiency estimates on U.S. bank efficiency from variants of all four of the major approaches -- DEA, SFA, TFA, and DFA -- and find mixed results.

Beaudry, Paul

PD August 1997. **TI** Cohort Patterns in Canadian Earnings: Assessing the Role of Skill Premia in Inequality Trends. **AU** Beaudry, Paul; Green, David. **AA** Beaudry: University of British Columbia and National Bureau of Economic Research. Green: University of British Columbia. **SR** National Bureau of Economic Research Working Paper: 6132; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 35. **PR** \$5.00. **JE** J24, J31. **KW** Labor Studies. Wages. Aging. Experience. Skill.

AB This paper documents the pattern of change in age-earnings profiles across cohorts and evaluates its implications. Using synthetic cohorts from the Survey of Consumer Finances over the period 1971-1993, we show that the age-earning profiles of Canadian men have been deteriorating for more recent cohorts in comparison to older cohorts. We find this pattern for both high school and university educated workers. In no case do we find evidence that the return to gaining experience has been increasing over time, nor do we find increased within-cohort dispersion of earnings. We view these findings as conflicting with the hypothesis that increased skill-premium largely explains the observed increase in dispersion of male weekly earnings in Canada. When looking at the pattern for women, we find only minor differences in the age-earning relationships across cohorts.

Becker, Randy

PD September 1997. **TI** Effects of Air Quality Regulation on Decisions of Firms in Polluting Industries. **AU** Becker, Randy; Henderson, Vernon. **AA** Becker: Brown University.

Henderson: Brown University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6160; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 39. **PR** \$5.00. **JE** L11, L51, Q25. **KW** Regulation. Air Quality. Pollution. Industrial Organization. Plant Size.

AB This paper examines unintended effects of air quality regulation on decisions of major polluters, using plant data for 1963 to 1992. A key regulatory tool since 1978 is the annual designation of county air quality attainment status, where non-attainment status triggers specific equipment requirements for new and existing plants. The authors find, in the later years of regulation, that, *ceteris paribus*, non-attainment status reduces expected births in polluting industries by 40-50%, resulting in a shift of polluting activity to cleaner, less populated attainment areas. Starting in the 1970's effects appear first for industries with bigger plant sizes and then, within industries, first for corporate plants relative to the much smaller non-affiliate, or single plant firm sector. In all industries, non-affiliates face less regulation than bigger corporate plants, resulting in a permanent shift away from corporate plant production in some industries. Older plants benefit from grandfathering provisions greatly enhancing survival probabilities.

Bekaert, Geert

PD August 1997. **TI** "Peso Problem" Explanations for Term Structure Anomalies. **AU** Bekaert, Geert; Hodrick, Robert J.; Marshall, David A. **AA** Bekaert: Stanford University National Bureau of Economic Research. Hodrick: Columbia University National Bureau of Economic Research. Marshall: Federal Reserve Bank of Chicago. **SR** National Bureau of Economic Research Working Paper: 6147; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** C51, E43, F30, G12. **KW** Asset Pricing. Interest Rates. Term Structure. Expectations Hypothesis.

AB The authors examine the empirical evidence of the expectations hypothesis of the term structure of interest rates in the United States, the United Kingdom, and Germany using the Campbell-Shiller (1991) regressions and a vector-autoregressive methodology. The authors argue that anomalies in the U.S. term structure may be due to a generalized peso problem in which a high-interest rate regime occurred less frequently in the sample of U.S. data than was rationally anticipated. They formalize this idea as a regime-switching model of short-term interest rates estimated with data from seven countries. Technically, this model extends recent research on regime-switching models with state-dependent transitions to a cross-sectional setting. Use of the small sample distributions generated by the regime-switching model for inference considerably weakens the evidence against the expectations hypothesis. However, a model that combines moderate time-variation in term premiums with peso-problem effects is largely consistent with term structure data.

Ben-David, Dan

PD July 1997. **TI** Free Trade, Growth, and Convergence. **AU** Ben-David, Dan; Loewy, Michael B. **AA** Ben-David: Tel Aviv University and National Bureau of Economic Research. Loewy: University of Houston. **SR** National Bureau of Economic Research Working Paper: 6095; National

Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** \$5.00. **JE** E10, F13, F43, O30, O41. **KW** International Trade. Growth. Trade Liberalization. Terms of Trade. Knowledge Spillovers.

AB What is the impact on output of movement towards free trade? Can trade liberalization have a permanent effect on output levels, and more importantly, does it have an impact on steady-state growth rates? The model developed here emphasizes the role that knowledge spillovers emanating from heightened trade can have in income convergence and growth rates over the long run. The model also facilitates an analysis of the dynamic behavior of income levels and terms of trade during the transition between steady states. Among the results of the model, unilateral liberalization by one country induces a level effect on the liberalizing country that reduces the income gap between it and other wealthier countries. In some cases, the liberalizing country may even leapfrog over initially wealthier countries. From the long-run growth perspective, unilateral (and multilateral) liberalization generates a positive impact on the steady-state growth of all the trading countries.

PD July 1997. **TI** International Trade and Structural Change. **AU** Ben-David, Dan; Papell, David H. **AA** Ben-David: Tel Aviv University and National Bureau of Economic Research. Papell: University of Houston. **SR** National Bureau of Economic Research Working Paper: 6096; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 11. **PR** \$5.00. **JE** C22, F13, F15, F32, F41. **KW** International Trade. Investment. Trade Liberalization. Imports. Exports.

AB In light of the substantial movement towards trade liberalization during the postwar period, this paper attempts to determine if, and when, countries experienced statistically significant changes in the paths of their export-GDP and import-GDP ratios. The authors find that: (1) most trade ratios exhibited a structural break in their time paths; (2) postbreak trade exceeded prebreak trade for the majority of countries; (3) the coincidence in timing between the import and export breaks does not appear to be particularly strong, and; (4) there is little relation between the extent of changes in imports and the extent of changes in exports for most countries.

Benarroch, Michael

PD February 1999. **TI** Trade in Intermediate Products, Pollution and Increasing Returns. **AU** Benarroch, Michael; Weder, Rolf. **AA** Benarroch: University of British Columbia and University of Winnipeg. Weder: University of Basel. **SR** University of British Columbia, Department of Economics Discussion Paper: 99/01; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1, Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 29. **PR** 30 cents per page U.S. and Canada, 40 cents per page International. **JE** F12, F13, Q28. **KW** International Trade. Environment. Increasing Returns. Monopolistic Competition.

AB This paper examines the relationship between trade in intermediate products, pollution and increasing returns. We develop a simple model with two countries and two stages of production, final and intermediate good production, where the production technology in both stages exhibits some form of increasing returns. Pollution occurs at the level of final good production. We analyze the effects of international trade in

intermediate products on pollution, output and welfare. In particular, we show that in the presence of increasing returns international trade can increase output and real income without raising pollution.

PD March 1999. **TI** Transboundary Pollution and the Gains from Trade. **AU** Benarroch, Michael; Thille, Henry. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 99/02; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1, Canada. **Website:** web.arts.ubc.ca/econ/dpintro.htm. **PG** 25. **PR** 30 cents per page U.S. and Canada, 40 cents per page International. **JE** D62, F13, F15, Q28. **KW** International Trade. Pollution. Production Externality. Transboundary Pollution. **AB** We analyze the effects of transboundary pollution on trade patterns and welfare in a general equilibrium trade model. Production in one industry generates pollution that negatively affects productivity, both at home and abroad, in another industry. Trade may lead to the spatial separation of production but it does not always lead to patterns of specialization that are efficient. Transboundary pollution, by breaking the link between the generation of pollution and the incidence of pollution can actually improve the potential for trade to distribute production in an efficient manner. Unfortunately, if trade does not distribute production in an efficient manner, transboundary pollution can exacerbate losses from trade, potentially leading to both countries losing from trade.

Bergemann, Dirk

PD July 1998. **TI** Experimentation in Markets. **AU** Bergemann, Dirk; Valimaki, Juuso. **AA** Bergemann: Yale University. Valimaki: Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1220; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. **Website:** www.kellogg.nwu.edu/research/math. **PG** 41. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D40, D83, L11, L13, L15. **KW** Entry. Exit. Learning. Price Competition. Information Externalities. **AB** We present a model of entry and exit with Bayesian learning and price competition. The value of the new product is initially unknown in the market, but purchases of the product yield information on its true value. We assume that the performance of the new product is publicly observable. As agents learn from the experiments of others, informational externalities arise. We determine the Markov Perfect Equilibrium prices and allocations in different market structures. In a single market, the informational externality among the buyers leads to too much learning. If the entry of the new product occurs in many distinct markets, then efficiency is reestablished in the limit as the number of markets grows. We finally analyze entry into different market segments and show that the new firm starts by selling to the informationally inexpensive buyers.

Berger, Allen N.

TI Consistency Conditions for Regulatory Analysis of Financial Institutions: A Comparison of Frontier Efficiency Methods. **AU** Bauer, Paul W.; Berger, Allen N.; Ferrier, Gary

D.; Humphrey, David B.

Berkowitz, Jeremy

TI Bankruptcy Exemptions and the Market for Mortgage Loans. **AU** Hynes, Richard; Berkowitz, Jeremy.

Berlin, Mitchell

PD November 1998. **TI** Deposits and Relationship Lending. **AU** Berlin, Mitchell; Mester, Loretta J.; **AA** Berlin: Federal Reserve Bank of Philadelphia. Mester: Federal Reserve Bank of Philadelphia and University of Pennsylvania. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 98/22; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. **Website:** www.phil.frb.org/econ/index.html. **PG** 32. **PR** no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** G10, G21, G28, G32. **KW** Intermediation. Banking. Relationship Lending. Disintermediation. Securitization. **AB** The authors empirically examine the hypothesis that access to deposits with inelastic rates (core deposits) permits a bank to make contractual agreements with borrowers that are infeasible if the bank must pay market rates. Access to core deposits insulates a bank's cost of funds from exogenous shocks, allowing the bank to insulate its borrowers against exogenous credit shocks. The authors find that, controlling for competitive conditions in loan markets, banks funded more heavily with core deposits provide more smoothing of loan rates in response to exogenous changes in aggregate credit risk. This suggests that a distinctive feature of bank lending is that firms and banks form multiperiod lending relationships in which loans need not break even period by period. It also partially explains the declining share of bank loans in credit markets. The authors' results suggests that access to core deposits is one of the foundations of relationship lending.

Berman, Eli

PD September 1997. **TI** Implications of Skill-Biased Technological Change: International Evidence. **AU** Berman, Eli; Bound, John; Machin, Stephen. **AA** Berman: Boston University and National Bureau of Economic Research. Bound: University of Michigan and National Bureau of Economic Research. Machin: University College London. **SR** National Bureau of Economic Research Working Paper: 6166; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **Website:** www.nber.org. **PG** 22. **PR** \$5.00. **JE** F10, J23, J31, O33. **KW** International Trade. Technological Change. Skill Bias. Wages. Labor Demand. **AB** Demand for less skilled workers decreased dramatically in the United States and in other developed countries over the past two decades. The authors argue that pervasive skill-biased technological change rather than increased trade with the developing world is the principal culprit. The pervasiveness of this technological change is important for two reasons. First, it is an immediate and testable implication of technological change. Second, under standard assumptions, the more pervasive the skill-biased technological change the greater the increase in the embodied supply of less skilled workers and the greater the depressing effect on their relative wages through world goods prices. In contrast, in the Heckscher-Ohlin model with small open economies, the skill-bias of local technological

changes does not affect wages. Thus, pervasiveness deals with a major criticism of skill-biased technological change as a cause. Testing the implications of pervasive, skill-biased technological change the authors find strong supporting evidence.

Bernanke, Ben S.

PD September 1997. **TI** Inflation Forecasts and Monetary Policy. **AU** Bernanke, Ben S.; Woodford, Michael. **AA** Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6157; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 60. **PR** \$5.00. **JE** E31, E52, E58. **KW** Economic Fluctuations. Central Banks. Monetary Policy. Inflation. Targeting.

AB Proposals for "inflation targeting" as a strategy for monetary policy leave open the important operational question of how to determine whether current policies are consistent with the long-run inflation target. An interesting possibility is that the central bank might target current private-sector forecasts of inflation, either those made explicitly by professional forecasters or those implicit in asset prices. The authors address the issue of existence and uniqueness of rational expectations equilibria when the central bank uses private-sector forecasts as a guide to policy actions. In a dynamic model which incorporates both sluggish price adjustment and shocks to aggregate demand and aggregate supply, the authors show that strict targeting of inflation forecasts is typically inconsistent with the existence of rational expectations equilibrium, and that policies approximating strict inflation-forecast targeting are likely to have undesirable properties. They conclude that the monetary authorities must rely on an explicit structural model of the economy.

Bernheim, B. Douglas

PD July 1997. **TI** Education and Saving: The Long-Term Effects of High School Financial Curriculum Mandates. **AU** Bernheim, B. Douglas; Garrett, Daniel M.; Maki, Dean M. **AA** Bernheim: Stanford University and National Bureau of Economic Research. Garrett: Cornerstone Research. Maki: Federal Reserve Board. **SR** National Bureau of Economic Research Working Paper: 6085; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** \$5.00. **JE** D12, E21, H31, I28. **KW** Public Economics. Education. Savings. Consumers. Household Finance.

AB Over the last forty years, the majority of states have adopted consumer education policies, and a sizable minority have specifically mandated that high school students receive instruction on topics related to household financial decision-making (budgeting, credit management, saving and investment, and so forth). In this paper, the authors attempt to determine whether the curricula arising from these mandates have had any discernible effect on adult decisions regarding saving. Using a unique household survey, the authors exploit the variation in requirements both across states and over time to identify the effects of interest. The evidence indicates that mandates have significantly raised both exposure to financial curricula and subsequent asset accumulation once exposed students reached adulthood. These effects appear to have been gradual rather than immediate -- a probable reflection of implementation lags.

Berry, Steven T.

PD June 1997. **TI** Public Radio in the United States: Does it Correct Market Failure or Cannibalize Commercial Stations? **AU** Berry, Steven T.; Waldfoegel, Joel. **AA** Yale University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6057; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 37. **PR** \$5.00. **JE** H41, L33, L82. **KW** Industrial Organization. Crowding Out. Public Economics. Underprovision. Radio.

AB Radio signals are pure public goods whose total value to society is the sum of their value to advertisers and listeners. Because broadcasters can capture only part of the value of their product as revenue, there is the potential for a classic problem of underprovision. Small markets have much less commercial program variety than larger markets, suggesting a possible underprovision problem. Public funding of radio broadcasting targets programming in three formats with at least some commercial competition. Whether public support corrects a market failure depends on whether the market would have provided similar services in the absence of public broadcasting. To examine this the authors ask whether public and commercial classical stations compete for listening share and revenue. They then directly examine whether public stations crowd out commercial stations. The authors find evidence consistent with the view that public broadcasting crowds out commercial programming in large markets.

Betts, Julian R.

PD December 1997. **TI** The Two-Legged Stool: The Neglected Role of Educational Standards in Improving America's Public Schools. **AA** University of California, San Diego. **SR** University of California, San Diego Department of Economics Working Paper: 97/32; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 26. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** I21, I28, J24. **KW** Educational Standards. School Quality. School Spending.

AB Two of the most important reforms to American public schooling this century have been an increase in the minimum school-leaving age and a dramatic increase in expenditures per pupil. The first reform is generally acknowledged to have increased students' earnings later in life, while the second reform has had much more limited effects. The paper argues that both reforms would have been much more effective if accompanied by increases in schools' standards, backed by testing. Several ways of strengthening standards, including curriculum reform backed by testing and remediation, higher grading standards and additional homework requirements are discussed. Limited evidence suggests that higher standards could improve schools substantially.

PD February 1998. **TI** Educational Crowding Out: Do Immigrants Affect the Educational Attainment of American Minorities? **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 98/04; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 30. **PR** \$3.00

U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** I20, J15, J61. **KW** Immigration. Human Capital. High-School Graduation. Schooling.

AB The paper studies whether immigration affects the probability of high school graduation of American-born minorities. Since both the costs and the benefits of education are likely to rise due to immigration, the direction of the impact is ambiguous. The paper uses pooled 1980 and 1990 Census data to test for a link. State fixed effect estimates suggest a negative and significant impact of immigrants on the probability of completing high school for native-born blacks and Hispanics. The results are robust to use of metropolitan fixed effects, controlling for the pupil-teacher ratio in the state, and removing those who have recently moved. The results for blacks are also robust to removal of observations from California. However, the results for Hispanic natives depend crucially on the inclusion of the Californian subsample.

Biddle, Jeff E.

TI Business Success and Businesses' Beauty Capital. **AU** Bosman, Ciska M.; Pfann, Gerard A.; Biddle, Jeff E.; Hamermesh, Daniel S.

TI Business Success and Businesses' Beauty Capital. **AU** Bosman, Ciska M.; Pfann, Gerard A.; Biddle, Jeff E.; Hamermesh, Daniel S.

Biswas, Debashis

PD September 1998. **TI** Interregional Migration and Polarisation: A Theoretical Analysis. **AU** Biswas, Debashis; Marjit, Sugata. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/582; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. **PG** 25. **PR** no charge. **JE** H40, H54, I31, J61, R23. **KW** Migration. Polarization. Income. Quality of Life.

AB We suggest that people higher up in the income ladder care more for the "quality of life" rather than for the level of income per se. We introduce such a behavioral assumption in a model of "rural-urban" and "urban-urban" migration. "Quality of life" depends crucially on the "social infrastructure," which is provided by the regional governments. We show, how starting from a given distribution of skilled labor across two regions and state of social infrastructure, one of them loses all the skilled people and the regions are polarized as "skilled" and "unskilled" segments of an economy. The result derived in the model continues to hold in more robust specifications of the framework. Our results continue to hold when regions are allowed to choose tax rates to finance "quality of life."

Black, Sandra E.

PD August 1997. **TI** How to Compete: The Impact of Workplace Practices and Information Technology on Productivity. **AU** Black, Sandra E.; Lynch, Lisa M. **AA** Black: Federal Reserve Bank of New York. Lynch: Tufts University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6120; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** D24, J24, J33, J51, M10. **KW** Labor Studies. Productivity. Work Practices. Information Technology. Unions.

AB Using data from a unique nationally representative sample of business, the authors examine the impact of workplace practices, information technology and human capital investments on productivity. The authors estimate an augmented Cobb Douglas production function with both cross section and panel data covering the period of 1987-1993 using both within and GMM estimators. They find that what is associated with higher productivity is not so much the adoption of a particular work practice, but rather how that work practice is actually implemented. They also find that those unionized establishments that have adopted industrial relations practices that promote joint decision making coupled with incentive based compensation have higher productivity than other similar non-union plants, while those businesses that are unionized but maintain more traditional labor management relations have lower productivity. The authors also find that the higher the average educational level of production workers, the higher is plant productivity.

Blackorby, Charles

PD January 1998. **TI** Partial-Equilibrium Welfare Analysis. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 98/06; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1, Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 15. **PR** 30 cents per page U.S. and Canada, 40 cents per page International. **JE** D11, D31, D61, D63, H20. **KW** Partial Equilibrium. Welfare. Consumer Surplus. Tax Reform.

AB The use of partial equilibrium models is common and typically, efficiency is characterized by maximizing consumer plus producer surplus (or sometimes, gross consumer surplus). The analysis appeals - implicitly or explicitly - to the concept of efficiency derived from general equilibrium models. It is shown - using the tax-reform methodology - in a simple general equilibrium model that, if the second-best outcome is not the first-best one, the sum of consumer plus surplus cannot lead an economy to its true second-best optimum.

PD June 1998. **TI** Fiscal Federalism Revisited. **AU** Blackorby, Charles; Brett, Craig. **AA** Blackorby: University of British Columbia and GREQAM. Brett: University of Essex. **SR** University of British Columbia, Department of Economics Discussion Paper: 98/09; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1, Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 26. **PR** 30 cents per page U.S. and Canada, 40 cents per page International. **JE** D61, H21, H70. **KW** Fiscal Federalism. Tax Reform. Production Efficiency.

AB We analyze how constitutional restrictions on tax bases within a federation affect the nature of Pareto-improving directions of tax reform and the design of optimal federal taxes. We show that constraints on federal taxation entail production inefficiency at the optimum, except under very restrictive circumstances. In passing, we show that using consumer prices as a control variables -- a standard procedure in tax-reform analysis -- rather than the taxes themselves, leads to incorrect conclusions when not all taxes or prices can be controlled.

PD August 1998. **TI** The Value of Limited Altruism. **AU** Blackorby, Charles; Bossert, Walter; Donaldson, David. **AA** Blackorby and Donaldson: University of British

Columbia. Bossert: University of Nottingham. SR University of British Columbia, Department of Economics Discussion Paper: 98/13; Department of Economics, University of British Columbia, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1, Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. PG 31. PR 30 cents per page U.S. and Canada, 40 cents per page International. JE D63, D64, D71. KW Social Choice. Altruism. Consequentialism.

AB Discounting the utilities of future people or giving smaller weights to groups other than one's own is often criticized on the grounds that the resulting objective function differs from the ethically appropriate one. This paper investigates the consequences of changes in the discount factor and weights when they are moved toward the warranted ones. Using the utilitarian value function, it is shown that, except in restrictive special cases, those moves do not necessarily lead to social improvements. We suggest that limitations to altruism are better captured by maximizing the appropriate value function subject to lower bounds on some utilities.

PD September 1998. TI Tax Harmonization and Pareto-Efficiency. AU Blackorby, Charles; Brett, Craig. AA Blackorby: University of British Columbia. Brett: University of Essex. SR University of British Columbia, Department of Economics Discussion Paper: 98/16; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1, Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. PG 15. PR 30 cents per page U.S. and Canada, 40 cents per page International. JE F02, H21, H87. KW Tax Harmonization. Tax Reform. Shadow Prices.

AB We consider the problem of tax harmonization among independent nations that have separate government budget constraints. The case for harmonization in this environment is shown to be weak, unless the nations do not trade with each other. We contrast our findings to a related situation in which countries are not required to meet a balance of payments. Here, when each country has but a single consumer, a case for tax harmonization emerges.

Blake, Christopher R.

TI Common Factors in Mutual Fund Returns. AU Elton, Edwin J.; Gruber, Martin J.; Blake, Christopher R.

Blake, David

TI The Hazards of Mutual Fund Underperformance: A Cox Regression Analysis. AU Lunde, Asger; Timmermann, Allan; Blake, David.

Blanchflower, David G.

PD July 1997. TI Changes Over Time in Union Relative Wage Effects in Great Britain and the United States. AA Dartmouth College and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6100; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG not available. PR \$5.00. JE J23, J31, J51. KW Labor Studies. Unions. Wages. Sticky Wages. Unemployment.

AB This paper uses broadly comparable micro data at the level of the individual to examine the extent to which union relative wage effects vary across groups and through time. The main findings may be summarized as follows. a) The union

wage gap averages 15% in the U.S. and 10% in Great Britain. b) The gap is positively correlated with the (lagged) unemployment rate, and appears to be untrended in both countries. Union wages are sticky. c) The size of the wage gap varies across groups. In both the U.S. and Great Britain the differential is relatively high in the private sector, in non-manufacturing, for manuals, the young and the least educated. d) In the U.S. there are no differences by race or gender in the size of the differential. In Great Britain it is higher both for women and non-whites.

PD July 1997. TI The Rising Well-Being of the Young. AU Blanchflower, David G.; Oswald, Andrew J. AA Blanchflower: Dartmouth College and National Bureau of Economic Research. Oswald: University of Warwick. SR National Bureau of Economic Research Working Paper: 6102; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 45. PR \$5.00. JE D69, I31, J10. KW Labor Studies. Welfare. Young. Well-Being. Quality of Life.

AB Many observers believe that times are growing harder for young people in Western society. This paper looks at the evidence and finds that conventional wisdom appears to be wrong. Using the U.S. General Social Surveys and the Eurobarometer Surveys, the paper studies the reported happiness and life-satisfaction scores of random samples of young men and women. The data cover the U.S.A. and thirteen European countries. The main finding is that from the 1970's to the 1990's the well-being of the young increased quite markedly. A number of possible explanations are considered.

Blau, Francine D.

PD June 1997. TI Gender and Youth Employment Outcomes: The U.S. and West Germany, 1984-91. AU Blau, Francine D.; Kahn, Lawrence M. AA Blau: Cornell University and National Bureau of Economic Research. Kahn: Cornell University. SR National Bureau of Economic Research Working Paper: 6078; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 39. PR \$5.00. JE J16, J23, J31. KW Children. Labor Markets. Employment. Wages. Germany.

AB This paper examines gender differences in labor market outcomes for hard-to-employ youth in the U.S. and West Germany. The authors find that young, less educated American men and especially women are far less likely to be employed than their German counterparts. Moreover, less educated young women and men in the United States have lower earnings relative to more highly educated youth in their own country, and also fare much worse than less educated German youth in absolute terms, correcting for purchasing power. The relatively high employment rates of less educated German youth combined with their relatively high wages raise the question of how they are successfully absorbed into the labor market. The authors present evidence that the large public sector in Germany in effect functions as an employer of last resort. The findings also suggest that the U.S. welfare system accounts for little of the U.S.-German difference in employment rates.

Blaug, Mark

PD August 1997. TI Twenty-fifth Anniversary of the UK Health Economists' Study Group, June, 1997. Where Are We Now in British Health Economics? AA University of Exeter.

SR University of Exeter Department of Economics Discussion Paper: 98/04; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England.

Website: www.ex.ac.uk/~BPearson/Research/DiscussionPapersEcon/DiscussionPapers.html. **PG** 24. **PR** no charge. **JE** D63, I11, I12, I18, I31. **KW** Health Economics. Welfare Economics. Education. Health Service.

AB Health economics took off in 1970 or thereabouts. Although early health economics made use of human capital theory, as did the economics of education, it soon took a different route inspired by Arrow's work on medical insurance. The economics of health has made steady theoretical and empirical progress since 1970, principally in coming to grips with the implications of supplier-induced demand and the difficulties of evaluating health care outcomes. Some of the best work on British health economics has been in the area of normative welfare economics, defining more precisely what is meant by equity in the delivery of health care and measuring the degree of success in achieving equity. Recent efforts to reform the NHS by the introduction of quasi-markets has sparked off useful studies of the extent to which these quasi-markets have improved the quantity and quality of health care in Britain.

PD November 1997. **TI** Fact or Fiction? Conference on Realism in Economics; Erasmus Institute for Philosophy and Economics, Erasmus University; "Ugly Currents in Modern Economics" **AA** University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 98/03; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. Website: www.ex.ac.uk/~BPearson/Research/DiscussionPapersEcon/DiscussionPapers.html. **PG** 22. **PR** no charge. **JE** B41, C62, C70, D41, D50. **KW** Formalism. Methodology. Rhetorics. General Equilibrium. Business Cycles.

AB An analysis of the disease of formalism in modern economics. Its manifestation in general equilibrium theory, game theory, the new classical macroeconomics and real business cycle theory. Symptoms of the disease in the current vogue for postmodernism in methodology. The possibilities for curing the disease.

PD February 1998. **TI** Misunderstanding Classical Economics -- The Sraffian Interpretation of the Surplus Approach. **AA** University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 98/02; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. Website: www.ex.ac.uk/~BPearson/Research/DiscussionPapersEcon/DiscussionPapers.html. **PG** 30. **PR** no charge. **JE** B12, B20. **KW** Classical Economics. Sraffian Economics. Equilibrium.

AB In the last decade or so, disciples of Piero Sraffa have propagated a particular interpretation of classical economics, according to which the classical economists focused the "core" of their analysis on the determination of relative prices in long-run equilibrium, taking as given the volume of output, its commodity composition, the technology of every industry, and real wages; everything else in classical economics is said to belong to the periphery and follows from the analysis at the core. This interpretation is an ingenious rational reconstruction, reading Sraffa's own concerns backwards into Smith, Ricardo, Mill and Marx, but it is an inaccurate historical reconstruction

and consigns to a lower level of significance crucial features, not to mention the most fruitful elements of classical political economy.

PD October 1998. **TI** The Formalist Revolution or What Happened to Orthodox Economics After World War II. **AA** University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 98/10; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. Website: www.ex.ac.uk/~BPearson/Research/DiscussionPapersEcon/DiscussionPapers.html. **PG** 22. **PR** no charge. **JE** B21, B22, B25. **KW** Formalism. Mathematical Economics. Institutional Economics. General Equilibrium. Capital Theory.

AB That the Keynesian Revolution in the 1930's marked a watershed in economics is well known. But that World War II and the immediate post-war years marked a similar break in the "paradigm" of professional economists is something which is little appreciated. There was in fact a Formalist Revolution that swept throughout economics. The author calls it a "formalist revolution" because it was marked by "formalism", which frequently but not necessarily implies a reliance on mathematical modeling and mathematical reasoning. The seeds of this Formalist Revolution were clearly laid down in the 1930's, but the full triumph of formalism only came after World War II. If one must date the post-war formalist revolution in economics, two years that stand out are 1947 when Paul Samuelson published his 1941 Ph.D. thesis and 1954 when Kenneth Arrow and Gerard Debreu published their proof of the "Existence of an Equilibrium for a Competitive Economy".

Blundell, Richard

PD September 1997. **TI** Pensions and Retirement in the UK. **AU** Blundell, Richard; Johnson, Paul. **AA** Blundell: University College of London. Johnson: Institute for Fiscal Studies. **SR** National Bureau of Economic Research Working Paper: 6154; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 48. **PR** \$5.00. **JE** H55, J14, J21, J22, J26. **KW** Aging. Public Economics. Public Pensions. Retirement. Labor Supply.

AB Labor force participation of men over the age of 50 fell dramatically in the United Kingdom between the early 1970's and early 1990's. The main element of the state retirement pension is flat rate, and for most people is unaffected by any potential contributions made after age 60. Overall the state retirement pension system offers no incentives for people to retire early. However, other benefits are available to people before the age of 65. Once these are accounted for a substantial incentive for early withdrawal from the labor market is apparent. The combination of this with the reduced demand for, and wages available to, low skilled labor can help explain the reduced labor force participation. The state pension system, though, is complemented by extensive occupational pension coverage. For those in the occupational system the rules of their own scheme are likely to be an important element in their retirement decision.

Bohi, Douglas R.

TI An Assessment of the EPA's SO₂ Emission Allowance Tracking System. **AU** Lile, Ronald D.; Bohi, Douglas R.; Burtraw, Dallas.

PD February 1997. **TI** SO2 Allowance Trading: How Experience and Expectations Measure Up. **AU** Bohi, Douglas R.; Burtraw, Dallas. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 97/24; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 21. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** H43, Q28, Q48. **KW** Sulfur Dioxide. Permit Trading. Air Pollution. Electric Utilities. Clean Air.

AB The SO2 trading program has achieved reductions in emissions ahead of schedule, with allowance prices below the marginal costs that were anticipated for the program. This paper explores the experience with the program and proposes a taxonomy of reasons why allowance prices are low. The overarching reason is that the most costly investments to accommodate full emission reductions have been successfully delayed. Application of a discount rate to these long run marginal costs yields an estimate of allowance price close to that observed today. Several factors have contributed to the delay in bearing these costs, and helped to reduce their magnitude. One group of factors stems from market fundamentals, especially the cost of rail transport of low sulfur coal. A second group includes the influences of state and federal regulators. A third group includes distinctions from the "imagined" program compared to that which was actually enacted.

Boldrin, Michele

PD August 1997. **TI** Social Security and Retirement in Spain. **AU** Boldrin, Michele; Jimenez-Martin, Sergi; Peracchi, Franco. **AA** Boldrin and Jimenez-Martin: Universidad Carlos III de Madrid. Peracchi: Universita d Annunzio. **SR** National Bureau of Economic Research Working Paper: 6136; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 46. **PR** \$5.00. **JE** H55, J14, J21, J22, J26. **KW** Aging. Public Economics. Social Security. Retirement. Labor Supply.

AB The authors describe the historical evolution of the Spanish Social Security system and its current organization. Their attention concentrates on the main public pension scheme for private employees in the manufacturing and service sector (RGSS) which covers by far the largest majority of Spanish workers. After describing the way in which pension and retirement decisions are regulated by this system, the authors try to compute the incentives to early retirement it provides to different kinds of individuals. They show that the Spanish SS legislation generates strong incentives to retire early and that Spanish workers tend to do so. In particular, their findings support the idea that pensions-induced incentives matter for the labor supply behavior of Spanish workers. The combination of certain features of the Spanish legislation seem to account well for the observed increase in the percentage of early retirees among Spanish pensioners during the nineties.

Bollen, Bernard

PD August 1998. **TI** A General Volatility Framework and the Generalised Historical Volatility Estimator. **AU** Bollen, Bernard; Inder, Brett A. **AA** Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Papers: 10/98; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/.

PG 41. **PR** no charge. **JE** C22, G14. **KW** Volatility. Intra-Day Returns. Autocorrelation in Returns. Stochastic Volatility. Stock Returns.

AB This study proposes a new approach to the estimation of the time series properties of daily volatility in financial markets. The estimation technique is a two stage procedure which initially estimates the volatility of any particular trading day from intraday data. This procedure is implemented over a number of trading days to produce a series of daily volatility estimates. A general volatility framework is also developed and the series of daily volatility estimates can be put into this framework to estimate the time series properties of daily volatility. Furthermore, with this new approach it is shown that the time series properties of daily volatility can be modeled in a wide range of functional forms, including those functional forms which capture asymmetric information effects.

Bomfim, Antulio N.

PD December 1997. **TI** Opportunistic and Deliberate Disinflation Under Imperfect Credibility. **AU** Bomfim, Antulio N.; Rudebusch, Glenn D. **AA** Federal Reserve Board and Federal Reserve Bank of San Francisco. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1998/01; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 23. **PR** no charge. **JE** E31, E52, E58. **KW** Monetary Policy. Inflation Expectations. Policy Rules. Inflation Targets.

AB One strategy for disinflation prescribes a deliberate path towards low inflation. A contrasting opportunistic approach eschews deliberate action and instead waits for unforeseen shocks to reduce inflation. This paper compares the ability of these two approaches to achieve disinflation -- and at what cost. We analyze these issues using the Federal Reserve's FRB/US model, which allows alternative assumptions to be made about expectations held by agents in the economy; hence, the credibility of the central bank can be considered in assessing the cost of deliberate and opportunistic disinflations.

Bordo, Michael D.

PD June 1997. **TI** Money, Sticky Wages, and the Great Depression. **AU** Bordo, Michael D.; Erceg, Christopher J.; Evans, Charles L. **AA** Bordo: Rutgers University and National Bureau of Economic Research. Erceg: Board of Governors of the Federal Reserve System. Evans: Federal Reserve Bank of Chicago. **SR** National Bureau of Economic Research Working Paper: 6071; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 47. **PR** \$5.00. **JE** E24, E32, E51, E52, N12. **KW** Economic History. Great Depression. Business Cycles. Wages. Monetary Policy.

AB This paper examines the ability of a simple stylized general equilibrium model that incorporates nominal wage rigidity to explain the magnitude and persistence of the Great Depression in the United States. The impulses to the analysis are money supply shocks. The Taylor contracts model is surprisingly successful in accounting for the behavior of major macroaggregates and real wages during the downturn phase of the Depression. This analysis provides support for the hypothesis that a monetary contraction operating through a sticky wage channel played a significant role in accounting for the downturn, and also provides an interesting refinement to

this explanation. In particular, both the absolute severity of the Depression's downturn and its relative severity compared to the 1920-21 recession are likely attributable to the price decline having a much larger unanticipated component during the Depression, as well as less flexible wage-setting practices during this latter period.

PD July 1997. **TI** Violations of the "Rules of the Game" and the Credibility of the Classical Gold Standard, 1880-1914. **AU** Bordo, Michael D.; MacDonald, Ronald. **AA** Bordo: Rutgers University and National Bureau of Economic Research. MacDonald: University of Strathclyde. **SR** National Bureau of Economic Research Working Paper: 6115; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** \$5.00. **JE** E42, E52, F31, F33, N23. **KW** Development. American Economy. International Finance. Gold Standard. Monetary Policy.

AB This paper examines the recently noted finding that the Classical gold standard represented a credible, well-behaved target zone system from the perspective of the well-documented failure of countries to play by the rules of the game in the classical period. In particular, the authors test a hypothesis of Svensson (1994) that a credible target zone can confer on a country a degree of independence in the operation of its monetary policy. The authors propose a number of ways of testing this proposition and implement them for a newly created monthly database over the period 1880-1913. They demonstrate that the Classical gold standard worked in the way predicted by Svensson's model. This would seem to have an important bearing on the kind of institutional framework required for a modern day target zone (such as the Exchange Rate Mechanism) to function effectively and, in particular, to weather speculative attacks.

Borjas, George J.

PD September 1997. **TI** Ethnicity and the Intergenerational Transmission of Welfare Dependency. **AU** Borjas, George J.; Sueyoshi, Glenn T. **AA** Borjas: Harvard University and National Bureau of Economic Research. Sueyoshi: Quantitative MicroSoftware. **SR** National Bureau of Economic Research Working Paper: 6175; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 28. **PR** \$5.00. **JE** I38, J13, J15. **KW** Labor Studies. Children. Ethnicity. Welfare.

AB There exist sizable difference in the incidence and duration of welfare spells across ethnic groups, and these differences tend to persist across generations. Using the National Longitudinal Surveys of Youth, we find that children raised in welfare households are themselves more likely to become welfare recipients for longer durations. We also show that growing up in an ethnic environment characterized by welfare dependency has a significant effect on both the incidence and duration of welfare spells. About 80 percent of the difference in welfare participation rates between two ethnic groups in the parental generation is transmitted to the children.

PD September 1997. **TI** To Ghetto or Not to Ghetto: Ethnicity and Residential Segregation. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6176; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website:

www.nber.org. **PG** 26. **PR** \$5.00. **JE** J15, R12, R20. **KW** Labor Studies. Ethnicity. Segregation. Human Capital.

AB This paper analyzes the link between ethnicity and the choice of residing in ethnically segregated neighborhoods. Data drawn from the National Longitudinal Surveys of Youth show that there exist strong human capital externalities both within and across ethnic groups. As a result, the segregation choices made by particular households depend both on the household's economic opportunities and on aggregate characteristics of the ethnic groups. The evidence suggests that highly skilled persons who belong to disadvantaged groups have lower probabilities of ethnic residential segregation -- relative to the choices made by most skilled persons in the most skilled groups.

Borsch-Supan, Axel

PD September 1997. **TI** Social Security and Retirement in Germany. **AU** Borsch-Supan, Axel; Schnabel, Reinhold. **AA** Borsch-Supan: University of Mannheim National Bureau of Economic Research. Schnabel: University of Mannheim. **SR** National Bureau of Economic Research Working Paper: 6153; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 32. **PR** \$5.00. **JE** H55, J14, J21, J22, J26. **KW** Aging. Public Economics. Social Security. Retirement. Labor Supply.

AB This paper describes the German public old age social security program and its incentive effects on retirement decisions. The paper presents the key features of the system and expresses retirement incentives in the form of accrual rates of social security wealth and implicit tax rates on earnings. It summarizes labor market behavior of older persons in Germany during the last 35 years and surveys the empirical literature on the effects of the social security system on retirement in Germany. The paper shows that even after the 1992 reform, the German system is actuarially unfair. This generates a substantial redistribution from late to early retirees and creates incentives to early retirement. Indeed, average retirement age is very low in West Germany and lower in East Germany. This tendency towards early retirement is particularly hurting in times of population aging when the German social security contribution rate is expected to increase dramatically.

Bosman, Ciska M.

PD July 1997. **TI** Business Success and Businesses' Beauty Capital. **AU** Bosman, Ciska M.; Pfann, Gerard A.; Biddle, Jeff E.; Hamermesh, Daniel S. **AA** Bosman and Pfann: Maastricht University. Biddle: Michigan State University. Hamermesh: University of Texas and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6083; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 21. **PR** \$5.00. **JE** J24, J31, J71, L20. **KW** Labor Studies. Beauty. Wages. Productivity. Discrimination.

AB The authors examine whether a difference in pay for beauty is supported by different productivity of people according to looks. Using a sample of advertising firms, the authors find that those firms with better-looking executives have higher revenues and faster growth than do otherwise identical firms whose executives are not so good-looking. The impact on revenue far exceeds the likely effect of beauty on the executives' wages. This suggests that their beauty creates firm-

specific investments, in the form of improved relationships within work groups, the returns to which are shared by the firm and the executive.

Bossert, Walter

TI The Value of Limited Altruism. **AU** Blackorby, Charles; Bossert, Walter; Donaldson, David.

Boudoukh, Jacob

TI Optimal Risk Management Using Options. **AU** Ahn, Dong-Hyun; Boudoukh, Jacob; Richardson, Matthew; Whitelaw, Robert F.

TI Optimal Risk Management Using Options. **AU** Ahn, Dong-Hyun; Boudoukh, Jacob; Richardson, Matthew; Whitelaw, Robert F.

PD December 1997. **TI** The Best of Both Worlds: A Hybrid Approach to Calculating Value at Risk. **AU** Boudoukh, Jacob; Richardson, Matthew; Whitelaw, Robert F. **AA** New York University. **SR** New York University, Salomon Center, Working Papers: S/97/31; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. **PG** 11. **PR** \$5.00 each; \$100.00 yearly subscription. **JE** G11, G12, G13. **KW** RiskMetrics. Historical Simulation. Value at Risk.

AB The hybrid approach combines the two most popular approaches to VaR estimation: RiskMetrics and Historical Simulation. It estimates the VaR of a portfolio by applying exponentially declining weights to past returns and then finding the appropriate percentile of this time-weighted empirical distribution. This new approach is very simple to implement. Empirical tests show a significant improvement in the precision of VaR forecasts using the hybrid approach relative to these popular approaches.

Bound, John

TI Implications of Skill-Biased Technological Change: International Evidence. **AU** Berman, Eli; Bound, John; Machin, Stephen.

Branstetter, Lee

PD June 1997. **TI** Japanese Research Consortia: A Microeconomic Analysis of Industrial Policy. **AU** Branstetter, Lee; Sakakibara, Mariko. **AA** Branstetter: University of California, Davis and National Bureau of Economic Research. Sakakibara: University of California, Los Angeles. **SR** National Bureau of Economic Research Working Paper: 6066; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 44. **PR** \$5.00. **JE** D62, F23, L14, L52, O31. **KW** Productivity. Research and Development. Knowledge Spillovers. Joint Ventures. Japan.

AB The existence of strong "spillover" effects of private R&D increases the potential social contribution of R&D but may depress the private incentives to undertake it. R&D consortia offer a potentially effective means of internalizing this externality. In this paper, the authors undertake the first large-sample econometric study of Japanese government-sponsored research consortia which uses firm-level data on research inputs and outputs to measure the impact of participation on the ex-post research productivity of the firm. The authors are able to

find evidence that frequent participation in these consortia has a positive impact on research expenditure and research productivity. These results hold after controlling for the potential endogeneity of the intensity of participation in consortia to participating firms' research productivity. Furthermore, the authors find evidence that part of this impact arises from the increased knowledge spillovers that take place within these consortia.

Brett, Craig

TI Fiscal Federalism Revisited. **AU** Blackorby, Charles; Brett, Craig.

TI Tax Harmonization and Pareto-Efficiency. **AU** Blackorby, Charles; Brett, Craig.

Broadbent, Ben

PD September 1997. **TI** Does Favorable Tax-Treatment of Housing Reduce Equipment Investment? **AU** Broadbent, Ben; Kremer, Michael. **AA** Broadbent: Columbia University. Kremer: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6161; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 17. **PR** \$5.00. **JE** E22, H24, R21. **KW** Economic Fluctuations. Public Economics. Housing. Taxation. Investment.

AB It is often argued that low tax rates on owner-occupied housing divert investment from equipment. This paper demonstrates that if people are heterogeneous in their propensity to save, and if there are constraints on borrowing, favorable tax treatment of owner-occupied housing up to a certain value increases equipment investment. This is because low housing taxes encourage renters to become owner-occupiers, and this leads existing owner-occupiers to shift their portfolio of other assets from rental housing to equipment.

Bronars, Stephen G.

TI The Effect of Welfare Payments on the Marriage and Fertility Behavior of Unwed Mothers: Results from a Twins Experiment. **AU** Grogger, Jeff; Bronars, Stephen G.

Brooks, Arthur C.

PD June 1998. **TI** Arts, Markets, and Governments. A Study in Cultural Policy Analysis. **AA** RAND Corporation. **SR** RAND Corporation Report: RGSD/142; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 107. **PR** no charge. **JE** H50, H71, L15, L23, M11. **KW** Performing Arts. Art. Public Subsidies. Cultural Policy. Symphony Orchestras.

AB Many arts firms are experiencing increasing costs relative to their revenues. This dissertation argues that demand management, if properly defined and pursued, represents at least a partial solution to this problem. First, an approach to demand expansion that depends on the luxury image of arts firms' products is compared both theoretically and empirically to one that emphasizes exposing new audience members to the arts. Second, the relationship between public subsidies to the arts and private philanthropy is examined. Whereas arguments could be made that public funds either leverage or crowd out donations, symphony orchestra data indicate that the two funding sources are in fact independent. Third, on the cost side,

it is shown that the ability to lower costs by substituting part-time or non-contracted artists for some that are currently full-time may be an effective strategy to fight the cost-revenue gap for some firms.

Brugiavini, Agar

PD September 1997. **TI** Social Security and Retirement in Italy. **AA** University of Venice. **SR** National Bureau of Economic Research Working Paper: 6155; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 55. **PR** \$5.00. **JE** H55, J14, J21, J22, J26. **KW** Aging. Public Economics. Social Security. Retirement. Labor Force.

AB This paper analyzes the incentives provided by the Italian Social Security System (SS) to supply labor. Italy is an interesting example in this context as: (1) fertility rates are low while life expectancy has improved dramatically over the past decades; (2) the SS Program is generous to retirees by providing very high replacement rates; (3) virtually all retirement income is in the form of SS benefits; (4) the existence of an early retirement provision, which attracts no actuarial penalty, distorts choices in favor of early retirement. This paper addresses the above issue by first documenting the stylized facts of the labor market and the SS provisions. A simulation model is then developed to better understand the incentive effects of SS on current cohorts of retirees. This model proposes two measures for incentives: the accrual rate from postponing retirement and the implicit tax/subsidy on potential earnings from working an additional year.

Bryton, Eugene

TI Breaking the Social Contract. The Fiscal Crisis in California Higher Education: Technical Appendix. **AU** Carroll, Stephen J.; Bryton, Eugene.

Buchinsky, Moshe

TI Evaluation of a Three-Step Method of Choosing the Number of Bootstrap Repetition. **AU** Andrews, Donald W. K.; Buchinsky, Moshe.

Bulkley, George

PD March 1997. **TI** Tests of the Expectations Hypothesis of the Term Structure in a Model with Bayesian Learning. **AU** Bulkley, George; Harris, Richard D. F.; Weller, Paul. **AA** Bulkley and Harris: University of Exeter. Weller: University of Iowa. **SR** University of Exeter Department of Economics Discussion Paper: 97/06; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. Website: www.ex.ac.uk/~BPearson/Research/DiscussionPapers/Econ/DiscussionPapers.html. **PG** 21. **PR** no charge. **JE** C11, E43, G14. **KW** Term Structure. Interest Rates. Small Sample Bias. Rational Expectations. Financial Markets. **AB** Evidence that the term structure of interest rates does not satisfy the expectations hypothesis has been reported in a number of papers. However, the nature and degree of this rejection is very sensitive to the exact specification of the tests. This paper identifies a source of small sample bias that is consistent with this empirical finding. The direction of the bias implies that the expectations hypothesis is more likely to be true than asymptotic test statistics would suggest. In financial markets, agents often receive information about the future in a form that cannot be explicitly incorporated in an econometric

model. The authors formalize this idea by assuming that agents supplement forecasts of the short yield obtained from the econometric model with noisy signals of the error term of the model. Using simulation experiments, the authors demonstrate that the bias is much more pronounced in the specification.

Burdett, Kenneth

PD April 1998. **TI** Pricing with Frictions. **AU** Burdett, Kenneth; Shi, Shouyong; Wright, Randall. **AA** Burdett: University of Essex. Shi: Queen's University. Wright: University of Pennsylvania. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 98/09; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. **PG** 26. **PR** no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** D24, D40, D50, D83. **KW** General Equilibrium. Capacity. Matching. Beveridge Curve.

AB The authors analyze markets where each of n buyers wants to buy one unit and each of m sellers wants to sell one or more units of an indivisible good. Sellers first set prices, then buyers choose which sellers to visit. There are equilibria where each buyer visits sellers at random and faces a positive probability of rationing when too many other buyers show up at the same location. The authors solve for equilibrium prices and other variables as functions of n and m , compare the outcome to the predictions of other models, and derive some limiting results as the economy gets large. They also discuss the impact of changes in capacity and show that the effects of an increase in supply can be very different depending on whether it occurs along the intensive or the extensive margin. This last result suggests that the standard matching function in the equilibrium search literature is misspecified.

Burns, Patrick

PD April 1998. **TI** Correlations and Volatilities of Asynchronous Data. **AU** Burns, Patrick; Engle, Robert F.; Mezrich, Joseph. **AA** Burns: Burns Statistics. Engle: University of California, San Diego. Mezrich: Morgan, Stanley & Co., Inc. **SR** University of California, San Diego Department of Economics Working Paper: 97/30R; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 15. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C32, G11, G15. **KW** Global Portfolio. Risk Management. Nonsynchronous. GARCH. Volatility. **AB** Asset prices are typically measured when markets close, however the closing times may differ across markets. As a result the returns appear to have predictability and correlations are understated. This will distort the value of portfolios, value at risk measures, and hedge strategies. A solution is proposed. Prices can be "synchronized" by computing estimates of the values of assets even when markets are closed, given information from markets which are open. From these prices, synchronized returns are defined and can be used to perform standard calculations including measuring time-varying volatilities and correlations with Generalized Autoregressive Conditional Heteroskedasticity (GARCH). The method is applied to G7 index data.

Burtraw, Dallas

TI An Assessment of the EPA's SO₂ Emission Allowance Tracking System. **AU** Lile, Ronald D.; Bohi, Douglas R.; Burtraw, Dallas.

TI SO₂ Allowance Trading: How Experience and Expectations Measure Up. **AU** Bohi, Douglas R.; Burtraw, Dallas.

PD September 1997. **TI** The Costs and Benefits of Reducing Acid Rain. **AU** Burtraw, Dallas; Krupnick, Alan J.; Mansur, Erin; Austin, David H.; Farrell, Deirdre. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 97/31R; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 35. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** H43, Q25, Q28, Q48. **KW** Sulfur Dioxide. Nitrogen Oxides. Cost-Benefit Analysis. Clean Air.

AB Title IV of the 1990 Clean Air Act Amendments initiated a dramatic reduction in emissions of sulfur dioxide and nitrogen oxides by electric power plants. This paper presents the results of an integrated assessment of the program benefits and costs, using the Tracking and Analysis Framework (TAF) developed for the National Acid Precipitation Assessment Program (NAPAP). Although dramatic uncertainties characterize the estimates -- especially with respect to the benefits of the program, many of which we have modeled explicitly -- the paper finds that the benefits can be expected to substantially outweigh the costs of the emission reductions. The lion's share of benefits result from reduced risk of premature mortality, especially through reduced exposure to sulfates, and these expected benefits measure several times the expected costs of the program. Significant benefits are also estimated for improvements in health morbidity, recreational visibility and residential visibility, each of which measures approximately equal to costs. In contrast, areas that were the focus of attention in the 1980's including effects to soils, forests and aquatic systems still have not been modeled comprehensively, but evidence suggests relatively small benefits, at least with respect to "use values" for the environmental assets that are affected.

PD November 1997. **TI** The Benefits of Reduced Air Pollutants in the U.S. from Greenhouse Gas Mitigation Policies. **AU** Burtraw, Dallas; Toman, Michael. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/01R; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 29. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** H23, I18, Q25, Q48. **KW** Climate Change. Greenhouse Gas. Ancillary Benefits. Air Pollution.

AB Policies that reduce greenhouse gas emissions can simultaneously alter emissions of conventional pollutants that have deleterious effects on human health and the environment. This paper first describes how these "ancillary" benefits can result from greenhouse gas (GHG) mitigation efforts. It then discusses methodologies for assessing ancillary benefits and provides a critical review of estimates associated with reductions of criteria air pollutants. These benefits in the U.S. may be significant, indicating a higher level of "no regrets" greenhouse gas abatement than might be expected based on simple economic calculations of abatement cost. However, the magnitude of ancillary benefits is highly dependent on the location, pollutant, degree of exposure, and the economic

behavior of individuals in response to the program, as well as the interaction of GHG abatement policies with the policies used for regulating conventional pollutants. As a rule of thumb, ancillary benefits could be on the order of 30 percent of the incremental cost of GHG mitigation. For modest carbon reduction that does not result in changes in emissions of sulfur dioxide by electric utilities, ancillary benefits may be as high as \$7 per ton.

Butcher, Kristin F.

PD June 1997. **TI** Recent Immigrants: Unexpected Implications for Crime and Incarceration. **AU** Butcher, Kristin F.; Piehl, Anne Morrison. **AA** Butcher: Boston College. Piehl: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6067; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 34. **PR** \$5.00. **JE** F22, J11, J31, J61, K42. **KW** Labor Markets. Crime. Immigration. Wages.

AB Among 18-40 year old men in the United States, immigrants are less likely to be institutionalized than the native-born, and much less likely to be institutionalized than native-born men with similar demographic characteristics. Furthermore, earlier immigrants are more likely to be institutionalized than more recent immigrants. Although all immigrant cohorts appear to assimilate toward the higher institutionalization rates of the native-born as time in the country increases, recent immigrants do not increase their institutionalization rates as quickly as one would predict from the experience of earlier immigrant cohorts. These results are the opposite of what one would predict from the literature on immigrant earnings, where earlier immigrants are typically found to have better permanent labor market characteristics.

Campa, Jose M.

PD September 1997. **TI** Is Real Exchange Rate Mean Reversion Caused by Arbitrage? **AU** Campa, Jose M.; Wolf, Holger C. **AA** New York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6162; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 18. **PR** \$5.00. **JE** F10, F31. **KW** International Finance. Exchange Rates. Trade. Purchasing Power Parity. Arbitrage.

AB The presence of purchasing power parity is often attributed to the exploitation of arbitrage opportunities in goods markets. The authors examine this presumption for a 1960-1996 monthly panel of bilateral exchange rates and trade for the G7 countries. The data exhibit strong mean reversion. However, the authors find very limited support for a simple arbitrage view. The deviations of real exchange rates and trade from trend are virtually uncorrelated. Large trade deviations neither trigger nor accelerate mean reversion. Large real exchange rate deviations do not lead to systematic changes in trade. Constricting the sample to eighteen-month episodes of notable mean reversion does not reveal any systematic relation either. The timing of these episodes does point, however, to an alternative explanation of mean reversion: the majority of episodes occur during periods of nominal exchange rate regime instability, pointing towards exchange rate policy or speculation as the immediate cause of mean reversion.

Caprio, Gerard, Jr.

TI Mexico's Banking Crisis: Devaluation and Asset Concentration Effects. **AU** Saunders, Anthony; Wilson, Berry; Caprio, Gerard, Jr..

Card, David

PD August 1997. **TI** Adapting to Circumstances: The Evolution of Work, School, and Living Arrangements Among North American Youth. **AU** Card, David; Lemieux, Thomas. **AA** Card: University of California, Berkeley and National Bureau of Economic Research. Lemieux: Universite de Montreal and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6142; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 38. **PR** \$5.00. **JE** D31, J10, J21, J22, J23. **KW** Labor Studies. Employment. Labor Markets. Income Distribution. Youth.

AB We use comparable micro data sets for the United States and Canada to study the responses of young workers to the external labor market forces that have affected the two countries over the past 25 years. We find that young workers adjust to changes in labor market opportunities through a variety of mechanisms, including changes in living arrangements, changes in school enrollment, and changes in work effort. In particular, we find that poor labor market conditions in Canada explain why the fraction of youth living with their parents has increased in Canada relative to the United States recently. Paradoxically, this move back home also explains why the relative position of Canadian youth in the distribution of family income did not deteriorate as fast as in the United States.

Carlino, Gerald

TI Aggregate Employment Growth and the Deconcentration of Metropolitan Employment. **AU** Chatterjee, Satyajit; Carlino, Gerald.

PD June 1998. **TI** The Cyclical Behavior of Regional Per Capita Incomes in the Postwar Period. **AU** Carlino, Gerald; Sill, Keith. **AA** Carlino: Federal Reserve Bank of Philadelphia and University of Pennsylvania. Sill: Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 98/11; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. **PG** 29. **PR** no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** D31, E32, R10. **KW** Income. Personal Income. Cyclical Dynamics. Business Cycles. Regional Economics.

AB This paper examines the cyclical dynamics of per capita personal income for the major United States regions during the 1953:3-95:2 period. The analysis reveals differences in the volatility of regional cycles. Controlling for differences in volatility, the authors find a great deal of co-movement in the cyclical response of four regions (New England, Southeast, Southwest, and Far West), that they call the core region, and the nation. They also find a great deal of co-movement between the Mideast and Plains regions, but these regions are only weakly correlated with national movements. The cyclical response of the Great Lakes region is markedly different from that of the other regions and the nation. Possible sources underlying

differences in regional cycles are explored, such as the share of a region's income accounted for by manufacturing, defense spending as a proportion of a region's income, oil price shocks, and the stance of monetary policy.

PD July 1998. **TI** Monetary Policy and the U.S. States and Regions: Some Implications for European Monetary Union. **AU** Carlino, Gerald; DeFina, Robert. **AA** Carlino: Federal Reserve Bank of Philadelphia and University of Pennsylvania. DeFina: Villanova University. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 98/17; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. **PG** 28. **PR** no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** E52, F33. **KW** European Union. Monetary Policy. Regional Economics. United States.

AB Under the European Monetary Union (EMU), member countries will be subject to common monetary policy shocks. Given the diversity in the economic and financial structures across the EMU economies, these common monetary shocks can be reasonably expected to have different effects. Little is known about what differences might arise, however, given the absence of any historical experience in Europe with a common currency. Like the countries of the EMU, U.S. states and regions differ in industry mix and financial composition, while at the same time they employ a common currency. Carlino and DeFina (1998, 1999) found considerable variability across sub-national economies in the United States from a common monetary policy shock. These differences were found to result primarily from cross-regional differences in industry mix. In this paper, the authors use these findings to construct an index that ranks EMU countries by their likely sensitivity to a common monetary shock.

Carroll, Christopher D.

PD July 1997. **TI** Unemployment Expectations, Jumping (S,s) Triggers, and Household Balance Sheets. **AU** Carroll, Christopher D.; Dunn, Wendy E. **AA** Carroll: Johns Hopkins University and National Bureau of Economic Research. Dunn: Johns Hopkins University. **SR** National Bureau of Economic Research Working Paper: 6081; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 52. **PR** \$5.00. **JE** D12, D84, D91, E21, E32. **KW** Economic Fluctuations. Debt. Balance Sheets. Expectations. Unemployment.

AB This paper examines the relationship between household balance sheets, consumer purchases, and expectations. The authors find few robust empirical relationships between balance sheet measures and spending, but they do find that unemployment expectations are robustly correlated with spending. The authors then construct a formal model of durables and nondurables consumption with an explicit role for unemployment and for household debt. They find that the model is capable of explaining several empirical regularities which are unexplained by standard models. Finally, they show that a loosening of liquidity constraints can produce a runup in debt similar to that experienced recently in the U.S., and that after such a liberalization consumer purchases show heightened sensitivity to labor income uncertainty, providing a potential rigorous interpretation of the widespread view that the buildup of debt in the 1980's may have played an important role in the weakness of consumption during and after the 1990 recession.

PD August 1997. **TI** Comparison Utility in a Growth Model. **AU** Carroll, Christopher D.; Overland, Jody; Weil, David N. **AA** Carroll: John Hopkins University and National Bureau of Economic Research. Overland: University of Colorado. Weil: Brown University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6138; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 39. **PR** \$5.00. **JE** D91, E21, O40. **KW** Growth. Utility. Consumption. Savings.

AB This paper compares the dynamics of two general equilibrium models of endogenous growth in which agents have "comparison utility." In the "inward-looking" economy, individuals care about how their consumption in the current period compares to their own consumption in the past. In the "outward-looking" economy, individuals care about how their own level of consumption compares with others' consumption. Consider the effect of a negative shock to capital. In an endogenous growth model with standard preferences, there will be no effect on the saving rate or the growth rate of output. In both of the models considered here, however, saving and growth will temporarily fall in response to the shock. The initial decline in saving and growth will be larger in the inward-looking case. However, since agents in the outward-looking case do not take into account the externality effect of their consumption, higher growth in this case leads to lower utility.

Carroll, Stephen J.

PD January 1998. **TI** Breaking the Social Contract. The Fiscal Crisis in California Higher Education: Technical Appendix. **AU** Carroll, Stephen J.; Bryton, Eugene. **AA** RAND Corporation. **SR** RAND Corporation Report: DRU/1799/CERT; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 8. **PR** no charge. **JE** H72, I22, I28. **KW** College Attendance. Higher Education. State Aid. Public Education.

AB Breaking the Social Contract: The Fiscal Crisis in California Higher Education, presents the results of a study of the fiscal condition and future viability of California's public higher education system. The research was conducted by RAND and supported by a grant from the William and Flora Hewlett Foundation through a subcontract from the Regents of the University of California on behalf of the California Education Round Table. This document reviews the data sources and methodologies to create each of the figures in that report.

PD August 1998. **TI** The Effects of a No-Pay/No-Play Plan on the Costs of Auto Insurance in Texas. **AU** Carroll, Stephen J.; Abrahamse, Allan F. **AA** RAND Corporation. **SR** RAND Corporation Report: IP/174; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 7. **PR** no charge. **JE** G22, G28. **KW** Automobile Insurance. No Fault. Compensation Costs. Insurance Premiums.

AB The cost of automobile insurance has been a major public policy issue for more than a decade. Recently, a new concept has emerged called "no-pay/no-play," which limits the compensation rights of people who were breaking the law when they were injured. The plan examined here bars drunk drivers and uninsured motorists from compensation for any non-

economic losses resulting from auto accident injuries. The analyses in this paper suggest that the no-pay/no-play insurance plan could reduce the costs of auto insurance. If current claiming, negotiating, and insurance purchasing patterns persist, the plan would reduce auto insurers' compensation costs for personal injuries by about six percent from the costs under Texas's current auto insurance rules. Given the past relationship between compensation costs and auto insurance premiums in Texas, this difference would translate into a reduction of about three percent in the average Texas driver's auto insurance premium.

Casadesus-Masanell, Ramon

PD July 1998. **TI** Maxmin Expected Utility over Savage Acts with a Set of Priors. **AU** Casadesus-Masanell, Ramon; Klibanoff, Peter; Ozdenoren, Emre. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1218; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 49. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D81. **KW** Maxmin Expected Utility. Uncertainty Aversion. Ambiguity. Expected Utility.

AB This paper provides an axiomatic foundation for a maxmin expected utility over a set of priors (MMEU) decision rule in an environment where the elements of choice are Savage acts. This characterization complements the original axiomatization of MMEU developed in a lottery-acts (or Anscombe-Aumann) framework by Gilboa and Schmeidler. MMEU preferences are of interest primarily because they provide a natural and tractable way of modeling decision-makers who display an aversion to uncertainty or ambiguity. Characterizing MMEU in a setting with Savage acts is of particular interest given a number of recent papers (for example, Ghirardato, and Sarin and Wakker) that point out that there may be real differences when using uncertainty averse preferences between a two-stage lottery-acts formulation and a one-stage Savage acts setting. MMEU over Savage acts also appears prominently in related papers that examine randomization and uncertainty averse decision-makers (Eichberger and Kelsey, Klibanoff).

Ceglowski, Janet

PD June 1998. **TI** Has the Border Narrowed? **AA** Bryn Mawr College and Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 98/15; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. **PG** 25. **PR** no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** F13, F14, F15. **KW** Trade. NAFTA. Gravity Models. Canada. United States.

AB In the late 1980's, Canada's provinces traded twenty times more with one another than with U.S. states of comparable size and distance. In other words, the Canada-U.S. border exerted a strong effect on the pattern of Canada's continental trade patterns. Since then, globalization and the formation of the Canada-U.S. and North American free trade

areas could have reduced the impact of the border on continental trade patterns. However, estimates from a gravity model of aggregate Canadian trade reveal no evidence of a narrowing border, at least through 1996. The border effect appears remarkably stable both over time and across equation specifications.

PD June 1998. **TI** Regionalization and Home Bias: The Case of Canada. **AA** Bryn Mawr College and Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 98/16; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. **PG** 26.

PR no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** F13, F14, F15. **KW** Trade. Gravity Models. Merchandise Trade. Canada. United States.

AB The bilateral trade flows between Canada and the United States (U.S.) are the world's largest and have grown rapidly in the nineteen nineties. Are they evidence of a North American trading bloc? A gravity model of trade finds that while economic size and proximity can explain much of the substantial trade between Canada and the U.S., Canada's merchandise trade exhibits a significant United States bias. The model also reveals that trade between Canada's provinces is thirty-one times that between a province and a country other than the U.S., significantly higher than estimates of Canada's home bias relative to the U.S.

Chai, Gen-Xiang

TI Nonlinear Wavelets Smoothing of Error Distribution in a Semiparametric Model. **AU** Li, Zhu-Yu; Chai, Gen-Xiang; Xu, Ke-Jun.

Chan, Louis K. C.

PD July 1997. **TI** The Risk and Return From Factors. **AU** Chan, Louis K. C.; Karceski, Jason; Lakonishok, Josef. **AA** Chan: University of Illinois. Karceski: University of Florida. Lakonishok: University of Illinois and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6098; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** G12. **KW** Asset Pricing. Returns. Japan. United Kingdom.

AB The ability to identify which factors best capture systematic return covariation is central to applications of multifactor pricing models. This paper uses a common data set to evaluate the performance of various proposed factors in capturing return comovements. Factors associated with the market, size, past return, book-to-market and dividend yield help explain return comovement on an out-of-sample basis (although they are not necessarily associated with large premiums in average returns). Except for the default premium and the term premium, macroeconomic factors perform poorly. The authors document regularities in the behavior of the more important factors, and confirm their influence in the Japanese and U.K. markets as well.

Chatterjee, Satyajit

PD March 1998. **TI** Aggregate Employment Growth and the Deconcentration of Metropolitan Employment. **AU** Chatterjee, Satyajit; Carlino, Gerald. **AA** Federal

Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 98/06; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. **PG** 39.

PR no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** E24, J21, O18, R23. **KW** Employment. Labor Markets. Metropolitan Areas. Congestion.

AB In this paper, we document a pronounced trend toward deconcentration of metropolitan employment during the postwar period in the United States. The employment share of initially more dense metro areas declined and those of initially less dense metro areas rose. Motivated by this finding, we develop a system-of-cities model in which increase in aggregate metropolitan employment causes employment share to shift in favor of less dense metro areas because congestion costs increase more rapidly for the initially more dense metro areas. A calibrated version of the model shows that the more than twofold increase in employment experienced by MSA's during the postwar period was indeed a powerful force favoring deconcentration.

Chattopadhyay, Subir

PD April 1998. **TI** Contingent Commodities and Implementation. **AU** Chattopadhyay, Subir; Corchon, Luis C.; Naeve, Joerg. **AA** Chattopadhyay: University of Alicante. Corchon: Autònoma University of Barcelona. Naeve: University of Caen. **SR** Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/572; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. **PG** 10. **PR** no charge. **JE** D52, D71. **KW** Contingent Commodities. Implementation. Single-Crossing. Social Choice.

AB In this note we consider the problem whether contingent commodity allocations can be used when the states are not directly contractible. In such a setting a contingent commodity allocation takes the form of a social choice function, and the question is whether this function is implementable (in the sense of full implementation). Using only very mild assumptions on the rule for selecting contingent commodity allocations, we derive a strong negative result, which also proves to be robust with respect to different solution concepts employed for implementation. These findings have interesting implications for the interpretation of Arrow-Debreu economies.

Chiesa, James

TI Education and the New Economy. Views from a Policy Planning Exercise. **AU** Stasz, Cathleen; Chiesa, James.

Chinn, Menzie David

PD July 1997. **TI** Monetary Policy in Japan, Germany and the United States: Does One Size Fit All? **AU** Chinn, Menzie David; Dooley, Michael P. **AA** University of California, Santa Cruz and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6092; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** \$5.00. **JE** E31, E43, E52, E58. **KW** International Finance. Monetary Policy. Japan. Central Banks. Inflation.

AB The authors study the post-war evidence for Japan to see

if the same specification for both the economy and the monetary policy rule is useful for understanding Japan's economy and monetary policy. A recurrent theme in the literature on Japanese monetary policy is that there are significant differences in both the policy procedures and objectives as compared to other industrial countries. In this paper the authors propose an "out of sample" test of a set of restrictions on a vector autoregression employed by Clarida and Gertler (1997) in their analysis of the Bundesbank's behavior. The authors' interpretation of the evidence is that, with minor adjustments, the same specification provides a useful framework for understanding monetary policy in Japan. Perhaps the most interesting finding is that the Bank of Japan appears to react to inflation over longer forecast horizons as compared to other central banks.

PD July 1997. **TI** The Usual Suspects? Productivity and Demand Shocks and Asian-Pacific Real Exchange Rates. **AA** University of California, Santa Cruz and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6108; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 16. **PR** \$5.00. **JE** D24, F31, F41, J24, O47. **KW** International Finance. Macroeconomics. Exchange Rates. Relative Prices. Productivity.

AB The evidence for a productivity-based explanation for real exchange rate behavior of East Asian currencies is examined. Using sectoral output and employment data, relative prices and relative productivities are calculated for China, Indonesia, Japan, Korea, Malaysia, Philippines, Singapore, Taiwan, and Thailand. Time series regressions of the real exchange rate on relative prices indicate a role for relative prices for Indonesia, Japan, and Korea. When examining real exchange rates and relative productivity ratios, one finds a relationship for Japan, Malaysia, and the Philippines. Only when augmenting the regressions with real oil prices are significant relationships obtained for Indonesia and Korea. Panel regression results are slightly more supportive of a relative price view of real exchange rates. However, the panel regressions incorporating productivity variables, as well as other demand side factors, are less encouraging, except for a small subset of countries (Indonesia, Japan, Korea, Malaysia, and the Philippines).

Chinoy, Sajjid

PD September 1998. **TI** Trade Liberalization and Labor Demand Elasticities: Evidence from Turkey. **AU** Chinoy, Sajjid; Krishna, Pravin; Mitra, Devashish. **AA** Chinoy: Stanford University. Krishna: Brown University. Mitra: Florida International University. **SR** Brown University, Department of Economics Working Paper: 98/16; Department of Economics, Box B, Brown University, Providence, RI 02912. **PG** 20. **PR** no charge. **JE** F12, F13, F21, F41, J23. **KW** Trade Policy. Imperfect Competition. Factor Demand. Labor Demand. Turkey.

AB In the recent debate over the impact of trade reform on factor markets, it has been argued that trade liberalization will lead to an increase in labor demand elasticities -- thus placing labor markets under increased pressure. Using Turkish plant level data spanning the course of a dramatic trade liberalization, this idea is tested.

Chifty, Tasneem

PD July 1997. **TI** An Empirical Investigation of Firms' Responses to Minimum Standards Regulations. **AU** Chifty, Tasneem; Witte, Ann Dryden. **AA** Chifty: Ohio State University. Witte: Florida International University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6104; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 17. **PR** \$5.00. **JE** D40, K23, L15, L51. **KW** Public Economics. Minimum Standards. Regulation. Exit. Product Quality.

AB The authors study firms' responses to minimum standards and other forms of regulatory intervention on both the probability of exit and the distribution of observable product quality, using firm level data for a nationally representative sample of markets. Their empirical work is motivated by the literature on quality and price competition in the presence of minimum standards. They find that minimum standards increase the probability that firms exit certain markets. Moreover, they find that exit can cause both the average and the maximum quality observed in the market to decline. This perverse regulatory effect occurs when excessively high standards cause high quality firms to exit. When minimum standards do not lead to exit, minimum standards can increase the average and maximum quality of products in the market. Such standards can not only force low quality firms to raise their quality, but may cause high quality firms to increase quality.

Cho, In-Koo

PD June 1998. **TI** Auctions and Coalitions: Joint Bidding by Budget Constrained Buyers. **AU** Cho, In-Koo; Jewell, Kevin; Vohra, Rajiv. **AA** Cho and Vohra: University of Brown. Jewell: Cornerstone Research. **SR** Brown University, Department of Economics Working Paper: 98/11; Department of Economics, Box B, Brown University, Providence, RI 02912. **PG** 36. **PR** no charge. **JE** C71, C72, D44. **KW** Auctions. Coalitions. Collusion. Joint Bidding.

AB The aim of this paper is to study the consequences of allowing budget constrained bidders to form coalitions before submitting bids in a first price auction. The authors analyze a simple model in which there is one "rich" bidder with private information about his valuation, and several "poor" bidders whose valuation exceeds their wealth. It may be in the seller's interest to allow the budget-constrained bidders to collude, and submit joint bids. The authors show that if the budget constraint is so severe that even the coalition of all the poor bidders is budget constrained, then the equilibrium coalition structure turns out to be one in which there are two coalitions. One slightly larger than the other. This leads to the more striking result that, if the rich bidder is more likely to have a low valuation, then this equilibrium coalition structure is one which yields the maximum expected revenue.

Choe, Mark

PD December 1997. **TI** Nonlinear Trading Models Through Sharpe Ratio Maximization. **AU** Choe, Mark; Weigend, Andreas S. **AA** Choe: Siemens Nixdorf Information Systems, Inc. Weigend: New York University. **SR** New York University, Salomon Center, Working Papers: S/97/40; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY

10012-1126. Website: www.stern.nyu.edu/salomon. PG 22. PR \$5.00 each; \$100.00 yearly subscription. JE G11, G12. KW Traders. Sharpe Ratio. Price Predictions. Trading Strategies. Profit Optimization.

AB While many trading strategies are based on price prediction, traders in financial markets are typically interested in risk-adjusted performance such as the Sharpe Ratio, rather than price predictions themselves. This paper introduces an approach which generates a nonlinear strategy that explicitly maximizes the Sharpe Ratio. It is expressed as a neural network model whose output is the position size between a risky and a risk-free asset. The iterative parameter update rules are derived and compared to alternative approaches. The resulting trading strategy is evaluated and analyzed on both computer-generated data and real world data (DAX, the daily German equity index). Trading based on Sharpe Ratio maximization compares favorably to both profit optimization and probability matching (through cross-entropy optimization). The results show that the goal of optimizing out-of-sample risk-adjusted profit can be achieved with this nonlinear approach.

Chowdhury, Omar Haider

TI Credit Programs for the Poor and the Nutritional Status of Children in Rural Bangladesh. AU Pitt, Mark M.; Khandker, Shahidur R.; Chowdhury, Omar Haider; Millimet, Daniel L.

TI Credit Programs for the Poor and the Nutritional Status of Children in Rural Bangladesh. AU Pitt, Mark M.; Khandker, Shahidur R.; Chowdhury, Omar Haider; Millimet, Daniel L.

Christodoulakis, George A.

PD December 1998. **TI** Forecasting (Log) Volatility Models. AU Christodoulakis, George A.; Satchell, Stephen E. AA Christodoulakis: University of Exeter. Satchell: University of London and University of Cambridge. **SR** University of Exeter Department of Economics Discussion Paper: 98/14; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. Website: www.ex.ac.uk/~BPEARSON/Research/Discussion

Papers Econ/Discussion Papers.html. PG 36. PR no charge. JE C15, C52, C53, G10. KW Compound Normal. EGARCH. Expected Utility. Forecasting. Stochastic Volatility.

AB A number of volatility forecasting studies had led to the perception that the ARCH- and Stochastic Volatility-type models provide poor out-of-sample forecasts of volatility. This is primarily based on the use of traditional forecast evaluation criteria concerning the accuracy and the unbiasedness of forecasts. In this paper we provide an assessment of volatility forecasting. We use the Log-Volatility framework to show how the inherent noise in the approximation of the actual- and unobservable- volatility by the squared return results in a misleading forecast evaluation. We characterize this noise and explicitly quantify its effects assuming normal errors. We extend our results using more general error structures such as the Compound Normal and the Gram-Charlier classes of distributions. We argue that evaluation problems are likely to be exacerbated by non-normality of the shocks and that non-linear and utility-based criteria can be more suitable for the evaluation of volatility forecasts.

Ciccone, Antonio

PD April 1998. **TI** Efficiency and Equilibrium with Dynamic Increasing Aggregate Returns Due to Demand

Complementarities. AU Ciccone, Antonio; Matsuyama, Kiminori. AA Ciccone: University of California, Berkeley. Matsuyama: Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1219; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 22. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE C61, C62, D24. KW Dynamic Nonconvexities. Hicks Allen Complements. Intertemporal Allocations. Equilibrium Allocations. Dynamic Inefficiencies.

AB When do dynamic nonconvexities at the disaggregate level translate into dynamic nonconvexities at the aggregate level? We address this question in a framework where the production of differentiated intermediate inputs is subject to dynamic nonconvexities and show that the answer depends on the degree of Hicks-Allen complementarity (substitutability) between differentiated inputs. In our simplest model, a generalization of Judd (1985) and Grossman and Helpman (1991) among many others, there are dynamic nonconvexities at the aggregate level if and only if differentiated inputs are Hicks-Allen complements. We also compare dynamic equilibrium and optimal allocations in the presence of aggregate dynamic nonconvexities due to Hicks-Allen complementarities between differentiated inputs.

Coco, Giuseppe

PD October 1997. **TI** Credit Rationing and the Welfare Gain from Usury Laws. AA University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 97/15; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. Website: www.ex.ac.uk/~BPEARSON/Research/Discussion

Papers Econ/Discussion Papers.html. PG 16. PR no charge. JE D82, E44, G14, G28. KW Collateral. Rationing. Usury Laws. Credit Markets. Adverse Selection.

AB This paper demonstrates that when a rationing equilibrium occurs in credit markets due to adverse selection effects of the interest rate, it is necessarily a multiple contracts (i.e. multiple interest rates) equilibrium with rationing at one contract. Some consequent arguments for a welfare-improving role of usury laws, based on the possibility of increasing the share of low-risk projects carried out in equilibrium, are then examined.

PD June 1998. **TI** On the Use of Collateral. AA University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 98/05; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. Website: www.ex.ac.uk/~BPEARSON/Research/Discussion

Papers Econ/Discussion Papers.html. PG 21. PR no charge. JE D82, G14. KW Collateral. Credit Markets. Rationing. Asymmetric Information. **AB** This paper surveys existing explanations for the use of collateral in credit markets and relates them to the empirical evidence on the subject. Collateral may be used as a screening or an incentive device in markets characterized by various forms of asymmetric and biased information. The evidence is incompatible with the use of collateral as a signal of projects'

quality, while broadly consistent with explanations based on its incentive properties and asymmetric evaluation of projects.

Cohen, Darrel

PD October 1997. **TI** Inflation, Taxes, and the Durability of Capital. **AU** Cohen, Darrel; Hassett, Kevin A. **AA** Cohen: Board of Governors of the Federal Reserve System. Hassett: American Enterprise Institute. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/53; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. **Website:** www.bog.frb.fed.us/pubs/feds/. **PG** 19. **PR** no charge. **JE** E22, E31, H25. **KW** Inflation. Taxation. Investment. Depreciation.

AB Auerbach (1979, 1981) has demonstrated that inflation can lead to large inter-asset distortions, with the negative effects of higher inflation unambiguously declining with asset life. We show that this is true only if depreciation is treated as geometric for tax purposes. When depreciation is straightline, higher inflation can have the opposite effect, discouraging investment in long-lived assets. Since our current system can be thought of as a mixture of straightline and geometric, the sign of the inter-asset distortion is indeterminate. We show that under current U.S. tax rules, the "straightline" and "geometric" effects approximately cancel for equipment, causing almost no inter-asset distortions. For structures, inflation clearly causes substitution into long-lived assets.

Collins, Susan M.

TI Real Exchange Rate Misalignments and Growth. **AU** Razin, Ofair; Collins, Susan M.

Collins, William J.

PD June 1997. **TI** Were Trade and Factor Mobility Substitutes in History? **AU** Collins, William J.; O'Rourke, Kevin H.; Williamson, Jeffrey G. **AA** Collins: Harvard University. O'Rourke: University College. Williamson: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6059; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **Website:** www.nber.org. **PG** 25. **PR** \$5.00. **JE** F13, F21, F22, N71, N72. **KW** Economic History. United States. International Trade. Factor Mobility. Migration.

AB Trade theorists have come to understand that their theory is ambiguous on the question: Are trade and factor flows substitutes? While this sounds like an open invitation for empirical research, hardly any serious econometric work has appeared in the literature. This paper uses history to fill the gap. It treats the experience of the Atlantic economy between 1870 and 1940 as panel data with almost seven hundred observations. When shorter run business cycles and "long swings" are extracted from the panel data, substitutability is soundly rejected. When secular relationships are extracted over longer time periods and across trading partners, once again substitutability is soundly rejected. Finally, the paper explores immigration policy and finds that policy makers never behaved as if they viewed trade and immigration as substitutes.

Cooper, Russell

TI Balladurette and Juppette: A Discrete Analysis of Scrapping Subsidies. **AU** Adda, Jerome; Cooper, Russell.

PD July 1997. **TI** Financial Fragility and the Great Depression. **AU** Cooper, Russell; Corbae, Dean. **AA** Cooper: Boston University and National Bureau of Economic Research. Corbae: University of Iowa. **SR** National Bureau of Economic Research Working Paper: 6094; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **Website:** www.nber.org. **PG** 33. **PR** \$5.00. **JE** E32, E41, E44, E58, N12. **KW** Economic Fluctuations. Monetary Policy. Great Depression. Financial Fragility. Increasing Returns.

AB The authors analyze a financial collapse, such as the one which occurred during the Great Depression, from the perspective of a monetary model with multiple equilibria. The economy considered contains financial fragility due to increasing returns to scale in the intermediation process. Intermediaries provide the link between savers and firms who require working capital for production. Fluctuations in the intermediation process are driven by variations in the confidence agents place in the financial system. The model matches quite closely the qualitative movements in some financial and real variables (the currency/deposit ratio, ex-post real interest rates, the level of intermediated activity, deflation, employment and production) during the Great Depression period.

Copeland, Brian R.

TI Is Free Trade Good for the Environment? **AU** Werner, Antweiler; Copeland, Brian R.; Taylor, M. Scott.

Corbae, Dean

TI Financial Fragility and the Great Depression. **AU** Cooper, Russell; Corbae, Dean.

Corchon, Luis C.

TI Contingent Commodities and Implementation. **AU** Chattopadhyay, Subir; Corchon, Luis C.; Naeve, Joerg.

Coronado, Julia Lynn

PD February 1997. **TI** The Effects of Social Security Privatization on Household Saving: Evidence from the Chilean Experience. **AA** Federal Reserve Board of Governors. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1998/12; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. **Website:** www.bog.frb.fed.us/pubs/feds/. **PG** 33. **PR** no charge. **JE** E21, G23, H55, J26, L33. **KW** Social Security. Privatization. Savings. Chile.

AB In recent years, a handful of countries have converted the financing of their social security systems from pay-as-you-go (PAYGO) to partial or full funding. Privatization is viewed as one way to insulate social security from the political and demographic pressures that currently threaten the financial stability of PAYGO systems. However, privatization would improve a nation's situation only if such a reform increases domestic saving. In this paper I use evidence from Chile, where social security was privatized in 1981, to assess the impact of such a reform on household saving rates. I find that the reform provided a significant stimulus for saving among higher income households, increasing their saving rates by more than seven percentage points. This increase in saving at the household level translates into an increase in national saving of more than two percent of GDP.

Costa, Dora L.

PD June 1997. **TI** Less of a Luxury: The Rise of Recreation Since 1888. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6054; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** D12, D63, H41, N11, N12. **KW** American Economy. Labor Supply. Development. Recreation. Public Goods.

AB The author shows that recreation has become much more egalitarian over the last hundred years by estimating recreational expenditure elasticity's in 1888-1890, 1917-1919, 1935-1936, 1972-1973, and 1991. She finds that expenditure elasticity's have fallen from around two at the beginning of the century to slightly more than one today and attributes this decline to rising incomes, declines in the price of recreation, and investment in public recreational goods. The findings have implications for trends in the well-being of the poor relative to the rich and for long-term trends in work hours and labor force participation rates.

Cox, James C.

PD December 1997. **TI** An Experiment to Evaluate Bayesian Learning of Nash Equilibrium Play. **AU** Cox, James C.; Shachat, Jason M.; Walker, Mark. **AA** Cox and Walker: University of Arizona. Shachat: University of California, San Diego. **SR** University of California, San Diego Department of Economics Working Paper: 97/36; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 13. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C72, C92. **KW** Bayesian Learning. Experiments. Bayesian-Nash Equilibrium.

AB Some recent theoretical approaches to the question of how players might converge over time to a Nash equilibrium have assumed that the players update their beliefs about other players via Bayes' Rule. Jordan has shown in a Bayesian model of this kind that play will (theoretically) always converge to a complete-information Nash equilibrium, even though individual players will not generally attain complete information. We report on an experiment designed to evaluate the empirical implications of Jordan's model. A finite version of the model is constructed which generates unique predictions of subjects' choices in nearly all periods. The experimental data reveals that the theory does reasonably well at predicting the equilibria that subjects eventually play, even when there are multiple equilibria. The results thus suggest that Jordan's Bayesian model can provide an empirically effective solution to the equilibrium selection problem when the players have beliefs with finite support. However, the model's predictions about the path of play over time are not consistent with the experimental data.

Crone, Theodore M.

PD November 1998. **TI** Measuring Housing Services Inflation. **AU** Crone, Theodore M.; Nakamura, Leonard I.; Voith, Richard. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 98/21; Working Papers, Department of Research,

Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. **PG** 22. **PR** no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** D13, H24. **KW** Housing. Implicit Rents. BLS. Owner Occupied. Rental Housing.

AB Recent papers have questioned the accuracy of the Bureau of Labor Statistics' methodology for measuring implicit rents for owner-occupied housing. We propose cross-checking the BLS statistics by using data on owner-occupied and rental housing from the American Housing Survey.

Croushore, Dean

TI Expectations and the Effects of Monetary Policy. **AU** Ball, Laurence; Croushore, Dean.

PD June 1998. **TI** Evaluating Inflation Forecasts. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 98/14; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. **PG** 33. **PR** no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** C53, E31, E37. **KW** Inflation. Forecasting. Expectations.

AB In the early 1980's, economists tested inflation forecasts and found that the forecasts were very bad. Either the surveys didn't capture forecasters' expectations or forecasters didn't have rational expectations. However, the sample period being examined consisted mostly of data from the volatile 1970's, when forecasting was extremely difficult. The question is: if we run the same types of tests that were performed 15 years ago on an updated sample, will we find the same problems with the forecasts? This paper finds that much of the empirical work from 15 years ago does not stand the test of time. The forecast errors from the surveys aren't nearly as bad today as they were in the 1970's. However, there remain some problems in the forecasts. It appears to be possible to improve inflation forecasts over some sample periods using bias regressions, and the forecasts don't pass all tests for optimality.

Cummins, J. David

PD May 1998. **TI** Consolidation and Efficiency in the U.S. Life Insurance Industry. **AU** Cummins, J. David; Tennyson, Sharon; Weiss, Mary A. **AA** Cummins: University of Pennsylvania and Federal Reserve Bank of Philadelphia. Tennyson: University of Pennsylvania. Weiss: Temple University. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 98/18; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. **PG** 32. **PR** no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** G22, G34. **KW** Life Insurance. Mergers. Acquisitions. Malmquist Methodology. Efficiency.

AB This paper examines the relationship between mergers and acquisitions, efficiency, and scale economies in the U.S. life insurance industry. We estimate cost and revenue efficiency over the period of 1988-1995 using data envelopment analysis (DEA). The Malmquist methodology is used to measure changes in efficiency over time. We find that acquired firms

achieve greater efficiency gains than firms that have not been involved in mergers or acquisitions. Firms operating with non-decreasing returns to scale and financially vulnerable firms are more likely to be acquisition targets. Overall, mergers and acquisitions in the life insurance industry have had a beneficial effect on efficiency.

PD August 1998. **TI** Organizational Form and Efficiency: An Analysis of Stock and Mutual Property-Liability Insurers. **AU** Cummins, J. David; Weiss, Mary A.; Zi, Hongmin. **AA** Cummins: University of Pennsylvania and Federal Reserve Bank of Philadelphia. Weiss: Temple University. Zi: Sejong University. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 98/19; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. **PG** 30. **PR** no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** D82, G22, L23, M11. **KW** Property Liability. Insurance. Agency Problems. Organizational Forms. Managerial Discretion.

AB This paper analyzes the efficiency of stock and mutual organizational forms in the property-liability insurance industry using non-parametric frontier efficiency methods. The authors test the managerial discretion hypothesis, which predicts that the market will sort organizational forms into market segments where they have comparative advantages in minimizing the costs of production, including agency costs. Both production and cost frontiers are estimated. The results indicate that stocks and mutuals are operating on separate production and cost frontiers and thus represent distinct technologies. The stock technology dominates the mutual technology for producing stock output vectors, and the mutual technology dominates the stock technology for producing mutual output vectors. However, the stock cost frontier dominates the mutual cost frontier for the majority of both stock and mutual firms. The finding of separate frontiers and organization-specific technological advantages is consistent with the managerial discretion hypothesis.

PD August 1998. **TI** Regulatory Solvency Prediction in Property-Liability Insurance: Risk-Based Capital, Audit Ratios, and Cash Flow Simulation. **AU** Cummins, J. David; Grace, Martin F.; Phillips, Richard D. **AA** Cummins: University of Pennsylvania and Federal Reserve Bank of Philadelphia. Grace and Phillips: Georgia State University. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 98/20; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. **PG** 52. **PR** no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** G22, G28. **KW** Insurance. Regulation. Property Liability. Insolvencies.

AB This paper analyzes the accuracy of the principal models used by U.S. insurance regulators to predict insolvencies in the property-liability insurance industry and compares these models with a relatively new solvency testing approach -- cash flow simulation. The authors compare the risk-based capital (RBC) system, the FAST (Financial Analysis and Surveillance Tracking) audit ratio system, and the cash flow simulation model developed by the authors. Both the RBC and FAST systems are static, ratio-based approaches to solvency testing,

whereas the cash flow simulation model implements dynamic financial analysis. Logistic regression analysis is used to test the models for a large sample of solvent and insolvent property-liability insurers. The authors find that the FAST system dominates RBC as a static method for predicting insurer insolvencies. They find the cash flow simulation variables add significant explanatory power to the regressions and lead to more accurate solvency prediction than the ratio-based models alone.

Cutler, David M.

PD July 1997. **TI** Adverse Selection in Health Insurance. **AU** Cutler, David M.; Zeckhauser, Richard J. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6107; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** D82, G22, I11. **KW** Health Care. Public Economics. Adverse Selection. Risk Sharing. Insurance.

AB Individual choice over health insurance may result in risk-based sorting across plans. Such adverse selection induces three types of losses: efficiency losses from individuals being allocated to the wrong plans; risk sharing losses since premium variability is increased; and losses from insurers distorting their policies to improve their mix of insureds. The authors discuss the potential for these losses, and present empirical evidence on adverse selection in two groups of employees: Harvard University, and the Group Insurance Commission of Massachusetts. In both groups, adverse selection is a concern. Harvard University's decision to contribute an equal amount to all insurance plans led to the disappearance of the most generous policy within 3 years. At the GIC, subsidizing premiums on a proportional basis and managing the most generous policy very tightly has contained adverse selection. A combination of prospective or retrospective risk adjustment, coupled with reinsurance for high cost cases, seems promising.

PD July 1997. **TI** The Medical Costs of the Young and Old: A Forty Year Perspective. **AU** Cutler, David M.; Meara, Ellen. **AA** Cutler: Harvard University and National Bureau of Economic Research. Meara: Harvard University. **SR** National Bureau of Economic Research Working Paper: 6114; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** H51, I11, I12, J13, J14. **KW** Aging. Health Care. Public Economics. Medical Care. Children.

AB In this paper, we examine the growth in medical care spending by age over the past 40 years. We show that between 1953 and 1987, medical spending increased disproportionately for infants, those under 1 year, and the elderly, those 65 and older. Annual spending growth for infants was 9.8 percent and growth for the elderly was 8.0 percent compared to 4.7 percent for people aged 1-64. Within the infant and the elderly population, excess spending growth was largely driven by more rapid growth of spending at the top of the medical spending distribution. Aggregate changes in outcomes for infants and the elderly are consistent with these changes in spending growth, but we do not present any causal evidence on this point.

PD August 1997. **TI** Managed Care and the Growth of Medical Expenditures. **AU** Cutler, David M.; Sheiner,

Louise. **AA** Cutler: Harvard University and National Bureau of Economic Research. Sheiner: Board of Governors of the Federal Reserve. **SR** National Bureau of Economic Research Working Paper: 6140; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** I11, I12, O33. **KW** Health Care. Public Economics. Medical Spending. Managed Care. Technology.

AB We use data across states to examine the relation between HMO enrollment and medical spending. We find that increased managed care enrollment significantly reduces hospital cost growth. While increased spending on physicians offsets some of these effects, we generally find a significant reduction in total spending as well. In analyzing the sources of hospital cost reductions, we find preliminary evidence that managed care has reduced the diffusion of medical technologies. States with high managed care enrollment were technology leaders in the early 1980's; by the early 1990's, those states were only average in their acquisition of new technologies. This finding suggests managed care may have a significant effect on the long-run growth of medical spending.

Dada, Maqbool

TI Capacity Investment under Demand Uncertainty: Price vs. Quantity Competition. **AU** van Mieghem, Jan A.; Dada, Maqbool.

Dai, Quang

PD August 1997. **TI** Specification Analysis of Affine Term Structure Models. **AU** Dai, Quang; Singleton, Kenneth J. **AA** Dai: Stanford University. Singleton: Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6128; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 42. **PR** \$5.00. **JE** C52, E43, G12. **KW** Asset Pricing. Affine Models. Interest Rates. Term Structure.

AB This paper characterizes, interprets, and tests the over-identifying restrictions imposed in affine models of the term structure. Letting $r(t) = \delta' Y(t)$, where Y is an unobserved vector affine process, the analysis proceeds in three steps. First, the authors show that affine models can be categorized according to the different over-identifying restrictions they impose on (i) δ , and (ii) the parameters of the diffusion matrices. Second, this formulation is shown to be equivalent to a model in which there is a terraced drift structure with one of the state variables being the stochastic long-run mean of r . This equivalence allows direct comparisons of the substantive restrictions on the dynamics of interest rates imposed in CIR-style models and models in which the state variables are the stochastic long-run mean and volatility of r . Third, the authors compute simulated method of moments estimates of a three-factor affine term structure model.

Darby, Michael R.

TI Labor Mobility from Academe to Commerce. **AU** Zucker, Lynne G.; Darby, Michael R.; Torero, Maximo.

Darmstadter, Joel

PD July 1997. **TI** Productivity Change in U.S. Coal Mining. **AU** Darmstadter, Joel; Kropp, Brian. **AA** Resources for the Future. **SR** Resources for the Future

Discussion Paper: 97/40; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 55. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** D24, L72, O31, Q41. **KW** Coal Mining. Productivity. Technological Change.

AB Labor productivity in U.S. coal mining increased at an average annual rate of slightly over four percent during the past 45 years. This report examines key factors contributing to that record -- particularly, technological innovation in both surface and underground mining and concurrent geographic shifts in U.S. coal production. Health, safety, and environmental regulations introduced in the sixties and seventies, as well as labor unrest, interrupted long-term productivity advance; but the interruption was of limited duration. Although our principal focus is on worker productivity, steady growth in the relative importance of non-labor inputs underscores the need to consider total factor productivity. The report touches on the productivity record using that measure.

DaVanzo, Julie

TI Economic and Cultural Influences on the Decision to Leave Home in Peninsular Malaysia. **AU** Johnson, Richard W.; DaVanzo, Julie.

Davenport, Andrew

TI Pensions and the Distribution of Wealth. **AU** McGarry, Kathleen; Davenport, Andrew.

David, Alexander

PD November 1997. **TI** Pricing the Strategic Value of Poison Put Bonds. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1998/06; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 49. **PR** no charge. **JE** G12, G13, G33, G34. **KW** Put Bonds. Liquidity. Reorganization. Borrowing Costs. Corporate Finance.

AB The role of puttable bonds as a defense against takeovers and as protection for investors against market and event risk has been appreciated in the literature, but the threatening power of put bondholders -- the ability to induce a financial crisis -- has largely been ignored. In times of low liquidity for a firm, put bondholders can threaten to either force the company into a reorganization or to raise its borrowing costs. This threatening power implies that there is a difference between the intrinsic and strategic value of the option. Using recent results in bargaining theory, the author solves for the strategic values of these options at the time of the triggering of the put. The theory is applicable both to cases where the bonds are held closely by a few institutional investors or the bonds are widely held by small market participants.

Davis, Donald R.

PD June 1997. **TI** The Home Market, Trade, and Industrial Structure. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6076; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** \$5.00. **JE** F10, L11, O10, R12. **KW** International Trade. Home

Market. Transport Costs. Market Size. Industrial Structure.

AB Does national market size matter for industrial structure? This has been suggested by theoretical work on "home market" effects, as in Krugman (1980, 1995). In this paper, the author shows that what previously was regarded as an assumption of convenience -- transport costs only for the differentiated goods -- matters a great deal. In a focal case in which differentiated and homogeneous goods have identical transport costs, the home market effect disappears. The paper discusses available evidence on the relative trade costs for differentiated and homogeneous goods. No compelling argument is found that market size will matter for industrial structure.

PD July 1997. **TI** Economic Geography and Regional Production Structure: An Empirical Investigation. **AU** Davis, Donald R.; Weinstein, David E. **AA** Davis: Harvard University and National Bureau of Economic Research. Weinstein: University of Michigan and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6093; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 35. **PR** \$5.00. **JE** F10, L11, L60, O19, R12. **KW** International Trade. Comparative Advantage. Economic Geography. Japan. Manufacturing.

AB There are two principal theories of why countries or regions trade: comparative advantage and increasing returns to scale. Yet there is virtually no empirical work that assesses the relative importance of these two theories in accounting for production structure and trade. The authors use a framework that nests an increasing returns model of economic geography featuring "home market effects" with that of Heckscher-Ohlin. The authors employ these trade models to account for the structure of regional production in Japan. They find support for the existence of economic geography effects in eight of nineteen manufacturing sectors. Moreover, they find that these effects are economically very significant. The latter contrasts with the results of Davis and Weinstein (1997), which found scant economic significance of economic geography. The authors conclude that while economic geography may explain little about the international structure of production, it is very important for understanding the regional structure.

PD August 1997. **TI** Human Capital, Unemployment, and Relative Wages in a Global Economy. **AU** Davis, Donald R.; Reeve, Trevor A. **AA** Davis: Harvard University and National Bureau of Economic Research. Reeve: Harvard University. **SR** National Bureau of Economic Research Working Paper: 6133; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** E24, F10, J24, J31, J64. **KW** International Trade. Human Capital. Wages. Unemployment.

AB This paper develops a simple framework for examining human capital accumulation, unemployment, and relative wages in a global economy. It builds on the models of Davis (1997) of trade between a flexible wage America and a rigid wage Europe. To this it adds a model of human capital accumulation based on Findlay and Kierzkowski (1983). A variety of comparative statics are examined, including changes in educational capital and population, entry of new countries to the trading world, technical change, and a productivity slowdown. We derive the consequences for the skilled-to-unskilled wage gap, unemployment, and skill composition.

De Fraja, Gianni

TI Contracts for Health Services: Quality versus Excess Capacity. **AU** Dieter, Bos; De Fraja, Gianni.

de Meza, David

PD July 1998. **TI** When Will Capitalist Meet Their Match? The Property Rights Theory of the Firm with Endogenous Timing. **AU** de Meza, David; Lockwood, Ben. **AA** de Meza: University of Exeter. Lockwood: University of Warwick. **SR** University of Exeter Department of Economics Discussion Paper: 98/07; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. Website: www.ex.ac.uk/~BPEARSON/Research/DiscussionPapers/Econ/DiscussionPapers.html. **PG** 24. **PR** no charge. **JE** D23, D83. **KW** Property Rights. Integration. Asset Ownership. Investment. Human Capital.

AB The standard property rights theory of the firm assumes asset ownership is decided by negotiation between managers prior to their choice of unverifiable investment. This paper endogenizes the event sequence in a matching model of market equilibrium. Equilibria in which agents invest (in human capital) and buy assets prior to matching are shown to exist and so are immune to Maskin and Tirole's recent criticism that the simplest of ownership arrangements can be improved upon. The model preserves the central feature of the original property rights theory, namely that ownership creates rent shifting and search advantages, so new results emerge. For example, there is a tendency, but not a necessity, for the agents with the highest marginal productivity of investment to own. As for the form of integration, multiple Pareto rankable equilibria may arise.

de Vos, Klaas

TI Social Security and Retirement in the Netherlands. **AU** Kapteyn, Arie; de Vos, Klaas.

Deb, Partha

PD April 1998. **TI** Moment-Based Estimation of Latent Class Models of Event Counts. **AU** Deb, Partha; Ming, Xing; Trivedi, Pravin K. **AA** Deb: Indiana University and Purdue University. Ming and Trivedi: Indiana University. **SR** University of California, San Diego, Department of Economics Working Paper: 98/12; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 22. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C21, C25, D12, I11. **KW** Finite Mixtures. Generalized Method of Moments. Negative Binomial. Maximum Likelihood. Health Care.

AB This paper develops and implements a Generalized Method of Moments (GMM) estimator for latent class models suitable for count data. The estimator uses conditional moment restrictions derived from standard count models. Both the efficient and consistent variants are considered. The implementation of optimal GMM based on semiparametric estimates of the weighting matrix appears to be problematic as the matrix is not guaranteed to be positive definite. A suboptimal variant which ensures positive definiteness is found to work well in computer simulations. The paper compares maximum likelihood and GMM estimators for Poisson based mixtures in two applications to U.S. health utilization data for the elderly from the National Medical Expenditure Survey.

Dee, Thomas S.

PD July 1997. **TI** Teen Drinking and Educational Attainment: Evidence From Two-Sample Instrumental Variables (TSIV) Estimates. **AU** Dee, Thomas S.; Evans, William N. **AA** Dee: Georgia Institute of Technology. Evans: University of Maryland and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6082; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 36. **PR** \$5.00. **JE** I12, I18, I21, J13, J24. **KW** Health Economics. Education. Drinking Ages. Excise Taxes. Instrumental Variables.

AB Recent research has suggested that one of the important, life-cycle consequences of teen drinking is reduced scholastic achievement. A convincing identification strategy would rely on the within-state variation in alcohol availability over time. To this end, the authors use the increases in the state minimum legal drinking ages (MLDA) during the late 70's and 80's as an exogenous source of variation in teen drinking. Using data from the 1977-92 Monitoring the Future surveys, the authors demonstrate that teens who faced an MLDA of 18 were substantially more likely to drink than teens who faced a higher drinking age. If teen drinking did reduce educational attainment, then attainment within a state should have risen after the MLDA was increased. Using data from over 1.3 million respondents from the 1960- 1969 birth cohorts, the authors find that changes in the MLDA had small and statistically insignificant effects on measures of educational attainment.

DeFina, Robert

TI Monetary Policy and the U.S. States and Regions: Some Implications for European Monetary Union. **AU** Carlino, Gerald; DeFina, Robert.

Dekel, Eddie

PD December 1997. **TI** On the Equivalence of Simultaneous and Sequential Binary Elections. **AU** Dekel, Eddie; Piccione, Michele. **AA** Dekel: Northwestern University. Piccione: University of Southampton. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1206; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 25. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D72, D82. **KW** Sequential Voting. Information Aggregation. Herding. Cascades.

AB We explore sequential voting in symmetric two-option environments. We show that the (informative) symmetric equilibria of the simultaneous voting game are also equilibria in any sequential voting structure. In unanimity games, (essentially) the whole set of equilibria is the same in all sequential structures. We also explore the relationship between simultaneous and sequential voting in other contexts. We illustrate several instances where sequential voting does no better at aggregating information than simultaneous voting. The inability of the sequential structure to use additional information in voting models is distinct from that in the herd-cascade literature.

Desai, Mihir A.

PD June 1997. **TI** Inflation in Open Economies. **AU** Desai, Mihir A.; Hines, James R., Jr. **AA** Desai: Harvard University. Hines Jr.: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6064; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** E31, F32, F41, F42, H87. **KW** Monetary Policy. Open Economy. Inflation. Taxation. Capital Movements.

AB This paper estimates the efficiency consequences of interactions between nominal tax systems and inflation in open economies. Domestic inflation changes after-tax real interest rates at home and abroad, thereby stimulating international capital movement and influencing domestic and foreign tax receipts, saving, and investment. The efficiency costs of inflation-induced international capital reallocations are typically much larger than those that accompany inflation in closed economies, even if capital is imperfectly mobile internationally. Differences between inflation rates are responsible for international capital movements and accompanying deadweight losses, suggesting that international monetary coordination has the potential to reduce the inefficiencies associated with inflation-induced capital movements.

DeYoung, Robert

PD October 1997. **TI** Youth, Adolescence, and Maturity of Banks: Credit Availability to Small Business in an Era of Banking Consolidation. **AU** DeYoung, Robert; Goldberg, Lawrence G.; White, Lawrence J. **AA** DeYoung: Office of the Comptroller of the Currency. Goldberg: University of Miami and New York University. White: New York University. **SR** New York University, Salomon Center, Working Papers: S/97/33; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. **PG** 34. **PR** \$5.00 each; \$100.00 yearly subscription. **JE** G21, G34. **KW** Banking. Loans. Small Businesses. Lending. MBHC.

AB This paper addresses the relationship between the aging process at new and relatively young banks and the tendency of banks to make loans to small businesses. Defining small business loans as C&I loans that are under \$1 million in size, the authors analyze a sample of banks that had assets of less than \$500 million for the years 1993-1996 and that were 25 years of age or younger. They find that banks' proclivities for small business lending are negatively related to their age and to their size. They proceed by introducing a number of additional explanatory variables. They find that small business lending is negatively related to the number of a bank's branches, its recent growth rate, and a bank's being part of a MBHC. Also, small business lending is positively related to higher concentration rates in urban areas but is negatively related to higher concentration in rural areas.

Diamond, Peter

PD July 1997. **TI** Social Security and Retirement in the U.S. **AU** Diamond, Peter; Gruber, Jonathan. **AA** Diamond: Massachusetts Institute of Technology and National Bureau of Economic Research. Gruber: U.S. Treasury Department and National Bureau of Economic Research. **SR** National

Bureau of Economic Research Working Paper: 6097; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 40. PR \$5.00. JE H22, H24, H55, J26. KW Elderly. Labor Studies. Taxation. Social Security. Retirement.

AB The largest entitlement program in the United States today is the Social Security program (SS). The authors provide an overview of the interaction between the SS system and retirement behavior. They begin by documenting historical trends in labor force participation and program receipt, and contemporaneous patterns of work and income receipt for the current cohort of older persons. They then present an overview of the structure of the SS program in the U.S., and review existing evidence on the relationship between SS and retirement. Finally, the authors present results of a simulation model which measures the implicit tax/subsidy rate on work after age 55 through the SS system. They find that, for married workers, the system is roughly neutral with respect to work after age 62, but that it heavily penalizes work after age 65. But there are larger tax rates on single workers and on high earning workers.

Diermeier, Daniel

TI Dynamics of Parliamentary Systems: Selections, Governments, and Parliaments. AU Baron, David P.; Diermeier, Daniel.

Dieter, Bos

PD August 1998. **TI** Contracts for Health Services: Quality versus Excess Capacity. AU Dieter, Bos; De Fraja, Gianni. AA University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/578; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. PG 37. PR no charge. JE I11, I18, L14, L15. KW Health Services. Incomplete Contracts. Quality. Hospitals.

AB This paper studies the effects of non-contractability of investment on the choices made by a health authority and the hospital with which it contracts for the provision of a specific service. We deal with a situation where the parties must write a short-term contract, that is, where they are prevented from signing a contract before making their investment choices. For this reason inefficiency emerges: the service quality chosen by the hospital is too low, and the health authority relies too much on outside providers.

Diewert, W. Erwin

PD June 1998. **TI** Index Number Theory using Differences Rather than Ratios. AA University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 98/10; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1, Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. PG 44. PR 30 cents per page U.S. and Canada, 40 cents per page International. JE C43, D24, E31, M41. KW Index Numbers. Consumer Surplus. Variance Analysis. Accounting. Symmetric Means.

AB Traditional index number theory decomposes a value ratio into the product of a price index times a quantity index. The price (quantity) index is interpreted as an aggregate price (quantity) ratio. The present paper takes an alternative

approach to index number theory, started by Bennet and Montgomery in the 1920's, that decomposes a value difference into the sum of a price difference plus a quantity difference. Axiomatic and economic approaches to this alternative branch of index number theory are considered in the present paper. The analysis presented has some relevance to accounting theory where revenue, cost or profit changes need to be decomposed into price and quantity components or where standard or budgeted performance is compared with actual performance (variance analysis). The methodology presented in the paper is also relevant for consumer surplus analysis.

Dixon, Lloyd S.

PD August 1998. **TI** The Financial Implications of Releasing Small Firms and Small-Volume Contributors from Superfund Liability. AA RAND Corporation. **SR** RAND Corporation Report: DRU/1366/02/EPA; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. PG 59. PR no charge. JE D20, H50, Q28. KW Superfund Liability. EPA. Small Businesses. Cleanup Costs.

AB Proposals to reform Superfund's liability provisions include proposals that would release potentially responsible parties (PRP's) that are small in size or are only responsible for a small proportion of the waste at the site. Such reforms have sometimes included provisions that would transfer the cleanup costs of parties released from liability to EPA. This report attempts to quantify the proportion of PRP's that would be released, cleanup costs that would be transferred to EPA, and the net effect on those PRP's that remain liable at the site. Preliminary results from this project first appeared in May 1996 in *The Liability and Expenditures of Small Business at Superfund Sites*, DRU/1366/EPA. Since then the database on which the analysis is based has been augmented and the analysis revised and extended.

Donaldson, David

TI The Value of Limited Altruism. AU Blackorby, Charles; Bossert, Walter; Donaldson, David.

Dooley, Michael P.

TI Monetary Policy in Japan, Germany and the United States: Does One Size Fit All? AU Chinn, Menzie David; Dooley, Michael P.

Dow, Will

PD January 1997. **TI** Health Care Prices, Health and Labor Outcomes: Experimental Evidence. AU Dow, Will; Gertler, Paul; Schoeni, Robert F.; Strauss, John; Thomas, Duncan. AA Dow and Schoeni: RAND Corporation. Gertler: University of California, Berkeley. Strauss: Michigan State University. Thomas: RAND Corporation and University of California, Los Angeles. **SR** RAND Corporation Report: DRU/1588/NIA; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. PG 38. PR no charge. JE I11, I12, J22, J31. KW Medical Care. Health Status. User Fees. Labor Supply. Wages.

AB While the demand for health care has been shown to decline as prices rise, little is known about the impact of raising user fees on health outcomes or other dimensions of well-being. Drawing on evidence from social experiments conducted in the

United States and Indonesia, the authors examine the effect of an increase in the costs of health care on a series of indicators of health status, labor force participation and wages of men and women. The estimated impact of prices on health outcomes depends critically on the specific indicator under study. More subjective health indicators appear to be contaminated by measurement error. For example, when health prices are raised, some measures, such as self-reported general health status, improve. However, health indicators that might be thought of as being more objective worsen as prices rise. This deleterious impact on health spills over to the labor market, and possibly wages.

Dunn, Wendy E.

TI Unemployment Expectations, Jumping (S,s) Triggers, and Household Balance Sheets. **AU** Carroll, Christopher D.; Dunn, Wendy E.

Eberly, Janice C.

TI The Mix and Scale of Factors with Irreversibility and Fixed Costs of Investment. **AU** Abel, Andrew B.; Eberly, Janice C.

Edlin, Aaron S.

PD July 1997. **TI** Contract Renegotiation in Agency Problems. **AU** Edlin, Aaron S.; Hermalin, Benjamin E. **AA** Edlin: University of California, Berkeley and National Bureau of Economic Research. Hermalin: University of California, Berkeley. **SR** National Bureau of Economic Research Working Paper: 6086; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** \$5.00. **JE** C78, D23, J41, K12, L23. **KW** Law. Hold Up. Agency Problems. Signaling. Contracts.

AB This paper studies the ability of an agent and a principal to achieve the first-best outcome when the agent invests in an asset that has greater value if owned by the principal than by the agent. When contracts can be renegotiated, a well-known danger is that the principal can hold-up the agent. The authors begin by identifying a countervailing effect: Investment by the agent can increase his value for the asset, thus improving his bargaining position in renegotiation. They show that option contracts will achieve the first best whenever this threat-point effect dominates the hold-up effect. Otherwise, achieving the first best is difficult. In such cases, the authors show that if parties have an appropriate signal available, then the first best is often attainable. A noisy signal, however, means that the optimal contract will involve terms that courts might view as punitive and so refuse to enforce.

Eichengreen, Barry

PD June 1997. **TI** The Gold Standard and the Great Depression. **AU** Eichengreen, Barry; Temin, Peter. **AA** Eichengreen: Center for Advanced Study in Behavioral Sciences and National Bureau of Economic Research. Temin: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6060; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 43. **PR** \$5.00. **JE** E52, E58, E63, F33, N10. **KW** Economic History. Monetary Policy. Central Banks. Gold Standard. Great Depression.

AB This paper, written primarily for historians, attempts to

explain why political leaders and central bankers continued to adhere to the gold standard as the Great Depression intensified. The authors do not focus on the effects of the gold standard on the Depression, which have been documented elsewhere, but on the reasons why policy makers chose the policies they did. The authors argue that the mentality of the gold standard was pervasive and compelling to the leaders of the interwar economy. It was expressed and reinforced by the discourse among these leaders. It was opposed and finally defeated by mass politics, but only after the interaction of national policies had drawn the world into the Great Depression.

Ejarque, Joao

PD March 1998. **TI** Investment Irreversibility and Precautionary Savings in General Equilibrium. **AA** Universidade Nova de Lisboa. **SR** University of California, San Diego, Department of Economics Working Paper: 98/08; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 31. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** E21, E22. **KW** Investment. Irreversibility. Precautionary Saving. Uncertainty.

AB Partial equilibrium models suggest that when uncertainty increases, agents increase savings and at the same time reduce investment in irreversible goods. This paper characterizes this problem in general equilibrium with technology shocks, additive output shocks and shocks to the marginal efficiency of investment. Uncertainty is associated with the variance of these random variables, and irreversibility is introduced by a non-negativity constraint on investment. I find that irreversibility and changes in uncertainty can be responsible for sizable movements in aggregate consumption and investment only if the shocks affect the marginal efficiency of investment. For all types of shocks, when concavity of the utility function is moderate or high, the irreversibility constraint never binds and the increase in variance has a negligible impact. Persistence in the shock process induces precautionary savings rather than contributing to irreversibility effects. If shocks are idiosyncratic and affect a cross section of agents over capital, an increase in their variance may induce an increase in aggregate investment even if all agents have an incentive to invest less, because zero investment is now an active lower bound for part of the cross section distribution.

Elliott, Graham

PD February 1998. **TI** Heterogeneous Expectations and Tests of Efficiency in the Yen/Dollar Forward Exchange Rate Market. **AU** Elliott, Graham; Ito, Takatoshi. **AA** Elliott: University of California, San Diego. Ito: Hitotsubashi University. **SR** University of California, San Diego, Department of Economics Working Paper: 98/06; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 16. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** F31, G14, G15. **KW** Exchange Rates. Expectations. Forward Rate. Efficient Markets.

AB This paper examines the efficiency of the forward yen/dollar market using micro survey data. Conventional tests

of unbiasedness do not correspond directly to the zero-profit condition. Instead, we use the survey data to calculate potential profits of individual forecasters based on a natural trading rule. We find that although the survey data are not the best predictor of future spot rates in terms of typical mean square forecast error criteria, the survey data can be used to obtain on average positive profits. However, these profits are small and highly variable. Similar results are found when we examine profits generated by a trading rule using regression forecasts. The profits are found to be correlated with risk type variables but not other available information.

Elmendorf, Douglas W.

PD January 1998. **TI** Government Debt. **AU** Elmendorf, Douglas W.; Mankiw, N. Gregory. **AA** Elmendorf: Federal Reserve Board. Mankiw: Harvard University and National Bureau of Economic Research. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1998/09; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. **Website:** www.bog.frb.fed.us/pubs/feds/. **PG** 70. **PR** no charge. **JE** F34, H62, H63, H87. **KW** Debt. Deficits. Fiscal Policy. Ricardian Equivalence.

AB This paper surveys the literature on the macroeconomic effects of government debt. It begins by discussing the data on debt and deficits, including the historical time series, measurement issues, and projections of future fiscal policy. The paper then presents the conventional theory of government debt, which emphasizes aggregate demand in the short run and crowding out in the long run. It next examines the theoretical and empirical debate over the theory of debt neutrality called Ricardian equivalence. Finally, the paper considers the various normative perspectives about how the government should use its ability to borrow.

Elton, Edwin J.

TI Economic News and the Yield Curve: Evidence from the U.S. Treasury Market. **AU** Balduzzi, Pierluigi; Elton, Edwin J.; Green, T. Clifton.

PD December 1997. **TI** Common Factors in Mutual Fund Returns. **AU** Elton, Edwin J.; Gruber, Martin J.; Blake, Christopher R. **AA** Elton and Gruber: New York University. Blake: Fordham University. **SR** New York University, Salomon Center, Working Papers: S/97/42; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **Website:** www.stern.nyu.edu/salomon. **PG** 26. **PR** \$5.00 each; \$100.00 yearly subscription. **JE** G11, G12, G23, G24. **KW** Mutual Funds. Returns. Systematic Factors. Return Generating Process.

AB A great deal of the literature in financial economics contains the assumption that returns are a linear function of a set of observable or unobservable factors. The specification of the variables in the linear process (known as the return-generating process) is one of the key issues in finance today. The return-generating process is an important building block in asset pricing models, portfolio optimization models, mutual fund evaluation, and event studies. For many purposes, it is important to separate systematic from non-systematic factors. There have been numerous attempts to examine the number and type of systematic factors in equity returns. The purpose of this study is to determine the systematic factors by examining

mutual fund returns. There are two reasons why it might be more informative to work with mutual fund returns rather than either security returns or a portfolio of security returns constructed on a mechanical basis.

Elul, Ronel

PD May 1998. **TI** Collateral, Credit-History and the Financial Decelerator. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 98/10; Department of Economics, Box B, Brown University, Providence, RI 02912. **PG** 17. **PR** no charge. **JE** D52, E44, G12, G21, G33. **KW** Financial Accelerator. Default. Collateral. Credit History.

AB We construct a simple general equilibrium model, in which agents borrow to purchase housing, and secure their loans with this long-lived asset. In this model, as the housing price falls defaulting becomes a weaker signal of (poor) credit quality, as wealthier agents are forced to default. If housing prices fall sufficiently, some agents may find it in their interest to strategically default -- that is, even if they actually have the funds to pay back their loan. We use the model to demonstrate that financial imperfections may sometimes mitigate real fluctuations, rather than aggravating them as suggested by much of the recent literature; we term this a financial decelerator. This occurs because strategic default leaves an agent with more income, which can be applied to purchasing housing, mitigating the decline in its price.

Engel, Charles

PD June 1997. **TI** Intra-National, Intra-Continental, and Intra-Planetary PPP. **AU** Engel, Charles; Hendrickson, Michael K.; Rogers, John H. **AA** Engel: University of Washington and National Bureau of Economic Research. Hendrickson and Rogers: Board of Governors of the Federal Reserve System. **SR** National Bureau of Economic Research Working Paper: 6069; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **Website:** www.nber.org. **PG** 26. **PR** \$5.00. **JE** E31, F31, F41. **KW** International Finance. Purchasing Power Parity. Exchange Rates.

AB This paper builds a model of adjustment toward PPP for a panel of real exchange rates. The model eliminates some inconsistencies in previous models, which implied a model for the real exchange rate of country B relative to country C that was not commensurate with the posited model of the real exchange rate for A relative to B, and A relative to C. The model allows the authors to handle correlation's across exchange rates in a panel in a natural way. Restrictions are put on an underlying model which yields a simple covariance matrix that can be easily estimated by GLS methods. The authors also put restrictions on the underlying model which allow for the easy estimation of a panel PPP model in which the speed of adjustment is not the same for all real exchange rates. The model does not find evidence in favor of reversion of PPP.

Engle, Robert F.

PD August 1997. **TI** Measuring, Forecasting and Explaining Time Varying Liquidity in the Stock Market. **AU** Engle, Robert F.; Lange, Joe. **AA** Engle: University of California, San Diego and National Bureau of Economic Research. Lange: University of California, San Diego. **SR** National Bureau of Economic Research Working Paper: 6129; National Bureau of Economic Research, 1050

Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 20. PR \$5.00. JE G12, G14. KW Asset Pricing. Market Liquidity. Market Depth. Patience. AB This paper proposes a new measure, VNET, of market liquidity, which directly measures the depth of the market. The measure is constructed from the excess volume of buys or sells during a market event defined by a price movement. As this measure varies over time, it can be forecast and explained. Using TORQ data, it is found that market depth varies positively, but less than proportionally, with past volume and negatively with the number of transactions. Both findings suggest that over time high volumes are associated with an influx of informed traders and reduce market liquidity. High expected volatility as measured by the ACD model of Engle and Russell (1995) and wide spreads both reduce expected depth. If the asymmetric trades are transacted in shorter than expected times, the costs will be greater, giving an estimate of the value of patience.

PD January 1998. TI Stochastic Permanent Breaks. AU Engle, Robert F.; Smith, Aaron D. AA University of California, San Diego. SR University of California, San Diego, Department of Economics Working Paper: 98/03; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG 29. PR \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. JE C12, C22, C51. KW Structural Breaks. Temporary Cointegration. Neyman-Pearson Testing. Unit Roots. Quasi-Maximum Likelihood. AB This paper aims to bridge the gap between processes where shocks are permanent and those with transitory shocks by formulating a process in which the long run impact of each innovation is time varying and stochastic. Frequent transitory shocks are supplemented by occasional permanent shifts. The stochastic permanent breaks (STOPBREAK) process is based on the premise that a shock is more likely to be permanent if it is large than if it is small. This formulation is motivated by a class of processes that undergo random structural breaks. Consistency and asymptotic normality of quasi maximum likelihood estimates is established and locally best hypothesis tests of the null of a random walk are developed. The model is applied to relative prices of pairs of stocks and significant test statistics result.

PD February 1998. TI Trades and Quotes: A Bivariate Point Process. AU Engle, Robert F.; Lunde, Asger. AA Engle: University of California, San Diego. Lunde: University of Aarhus. SR University of California, San Diego, Department of Economics Working Paper: 98/07; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG 17. PR \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. JE C41, C51, G10. KW Market Microstructure. Bivariate Model. Duration Model. Limit Order. High Frequency Data.

AB Recent empirical work has studied point processes of transactions in financial markets and observed clear time dependent patterns in these arrival times. However these studies do not examine the timing of quoted price changes. This paper formulates a bivariate point process to jointly analyze transaction and quote arrivals. In microstructure models,

transactions may reveal private information which is then incorporated into new prices. This paper examines the speed of this information flow and the circumstances which govern it. One of the main conclusions is that conditional on past quote times, the impact of trade information is to make quote durations longer when there is more information flow rather than less. This is interpreted as evidence that limit order suppliers become more cautious in the presence of apparent informational trading.

TI Correlations and Volatilities of Asynchronous Data. AU Burns, Patrick; Engle, Robert F.; Mezzrich, Joseph.

TI Econometric Analysis of Discrete-Valued Irregularly-Spaced Financial Transactions Data Using a New Autoregressive Conditional Multinomial Model. AU Russell, Jeffrey R.; Engle, Robert F.

Erceg, Christopher J.

TI Money, Sticky Wages, and the Great Depression. AU Bordo, Michael D.; Erceg, Christopher J.; Evans, Charles L.

Eudey, Gwen

PD December 1997. TI Diagnostic Evaluation of the Real Business Cycle Model with Factor Hoarding. AA Federal Reserve Bank of Philadelphia. SR Federal Reserve Bank of Philadelphia Research Working Paper: 97/27; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. PG 22. PR no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. JE C52, E32. KW Business Cycles. Utility Functions. Capital. Utilization Rates.

AB This paper proposes evaluating the assumptions of the RBC model rather than merely the ability of model-constrained data to match moments of official data counterparts. Reduced-form relationships can be used to create model-consistent derivations of capital and labor input. Since several relationships exist for each input, comparison of their properties highlights weaknesses and strengths in the model assumptions. Applied to the RBC model with factor hoarding and depreciation through use, the approach highlights weaknesses in the standard utility function and casts doubt upon use of the model to improve official capital stock measures or utilization rates.

Evans, Charles L.

TI Money, Sticky Wages, and the Great Depression. AU Bordo, Michael D.; Erceg, Christopher J.; Evans, Charles L.

Evans, William N.

TI Teen Drinking and Educational Attainment: Evidence From Two-Sample Instrumental Variables (TSIV) Estimates. AU Dee, Thomas S.; Evans, William N.

Fan, C. Simon

PD April 1998. TI Incentives and Corruption in Chinese Economic Reform. AU Fan, C. Simon; Grossman, Herschel I. AA Fan: Lingnan College. Grossman: Brown University. SR Brown University, Department of Economics Working Paper: 98/08; Department of Economics, Box B, Brown

University, Providence, RI 02912. **PG** 14. **PR** no charge. **JE** D78, P21. **KW** Incentives. Corruption. Economic Reform. China. Communist Party.

AB This paper argues that, given the legacy of Chinese communism and its political structure, corruption, the threat of punishment for corruption, and the selective enforcement of this threat are inevitable concomitants of economic reform in China. We claim that corruption serves as an advantageous method of compensation that both satisfies the political objectives of the Communist Party and provides an effective inducement to local officials to promote economic reform.

Faynzilberg, Peter S.

PD March 1998. **TI** Factorization and Decomposition of Relations. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1211; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 9. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C10, C60. **KW** Category Theory. Relational Algebra. Correspondence. Homomorphism Theorems. Closure.

AB The paper extends the factor and decomposition theorems for functions to the category *Rel* of sets and relations. The converse theorems are also stated and proved. The author shows that the (retraction, isomorphism, section)-decomposable relations form a closure system on *Mor(Rel)*, and characterize it in terms of a closure operator.

Feenstra, Robert C.

PD June 1997. **TI** Productivity Measurement and the Impact of Trade and Technology on Wages: Estimates for the U.S., 1972-1990. **AU** Feenstra, Robert C.; Hanson, Gordon H. **AA** Feenstra: University of California and National Bureau of Economic Research. Hanson: University of Texas and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6052; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 49. **PR** \$5.00. **JE** F14, F23, J24, J31, O33. **KW** International Trade. Investment. Productivity. Wages. Technological Change.

AB We develop an empirical framework to assess the importance of trade and technical change on the wages of production and non-production workers. Trade is measured by the foreign outsourcing of intermediate inputs, while technical change is measured by the shift towards high-technology capital such as computers. In our benchmark specification, we find that both foreign outsourcing and expenditures on high-technology equipment can explain a substantial amount of the increase in the wages of non-production (high-skilled) relative to production (low-skilled) workers that occurred during the 1980's. Surprisingly, it is expenditures on high-technology capital other than computers that are most important. These results are very sensitive, however, to our benchmark assumption that industry prices are independent of productivity. When we allow for the endogeneity of industry prices, then expenditures on computers become the most important cause of the increased wage inequality, and have a 50% greater impact than does foreign outsourcing.

Feist, Holger

TI Eurowinners and Eurolosers: The Distribution of Seigniorage Wealth in EMU. **AU** Sinn, Hans-Werner; Feist, Holger.

Feldman, Allan M.

PD July 1998. **TI** Value of Life, Value of Time, and Constant Relative Risk Aversion Utility. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 98/13; Department of Economics, Box B, Brown University, Providence, RI 02912. **PG** 17. **PR** no charge. **JE** D11, D61, D91. **KW** Value of Life. Value of Time. Risk Aversion. Utility.

AB This paper develops two straightforward value of life models; one is a probabilistic value of life model and the second is a deterministic value of time model. Simplifying assumptions allow both models to be solved analytically. Constant relative risk aversion utility functions are used and both value of life and value of time are solved for as functions of the relative risk-aversion parameter.

Feldstein, Martin

PD June 1997. **TI** The Economics of Prefunding Social Security and Medicare Benefits. **AU** Feldstein, Martin; Samwick, Andrew. **AA** Feldstein: National Bureau of Economic Research. Samwick: Dartmouth College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6055; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 54. **PR** \$5.00. **JE** E21, E24, H51, H55, I18. **KW** Elderly. Economic Fluctuations. Prefunding Benefits. Medicare. Social Security.

AB This paper presents a detailed analysis of the economics of prefunding benefits for the aged, focusing on Social Security but indicating some of the analogous magnitudes for prefunding Medicare benefits. The authors use detailed Census and Social Security information to model the transition to a fully funded system based on mandatory contributions to individual accounts. The funded system examined would permanently maintain the level of benefits now specified in current law and would require no new government borrowing. During the transition, the combined rate of payroll tax and mandatory saving rises initially by 2 percentage points and then declines. The authors estimate the impact of such prefunding on the growth of the capital stock and the level of national income. The authors also discuss distributional issues and the way that the poor can be at least as well off as under Social Security.

PD August 1997. **TI** Transition to a Fully Funded Pension System: Five Economic Issues. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6149; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** \$5.00. **JE** E21, H55. **KW** Social Security. Public Pensions. Aging. Health Care. Savings.

AB This paper provides a relatively nontechnical discussion of the effects of shifting from a pay-as-you-go system of Social Security pensions to a fully funded plan based on individual accounts. The analysis discusses the rationale for such a shift and deals with five common problems: (1) the nature of the transition path; (2) the effect of the shift on national saving and capital accumulation; (3) the rate of return that such accounts

would earn; (4) the risk of unfunded and funded systems; and (5) the distributional effects of the shift.

PD August 1997. **TI** The Political Economy of the European Economic and Monetary Union: Political Sources of an Economic Liability. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6150; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 32. **PR** \$5.00. **JE** F13, F15, F20, F33, F42. **KW** European Union. International Trade. International Finance. Economic Integration. Political Economy.

AB EMU would be an economic liability. A single currency would cause at most small trade and investment gains but would raise average cyclical unemployment and would probably raise inflation, perpetuate structural unemployment, and increase the risk of protectionism. EMU is nevertheless being pursued in order to create a political union. Fundamental disagreements among member states about economic policies, foreign and military policies, and the sharing of political power are likely to create future intra-European conflicts. A united Europe would be a formidable participant in the 21st century's global balance of power, with uncertain consequences for world stability and peace.

Fenn, George W.

PD December 1997. **TI** Good News and Bad News About Share Repurchases. **AU** Fenn, George W.; Liang, Nellile. **AA** Fenn: Milken Institute. Liang: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1998/04; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 20. **PR** no charge. **JE** G32, G35. **KW** Stock Repurchases. Free Cash Flow. Corporate Finance. Management. Dividends.

AB The authors estimate the cross-sectional relationship between open market repurchases and accounting data for a large sample of dividend-paying and non-dividend-paying firms over a twelve year period (1984-95). Consistent with the hypothesis that firms use open market repurchases to reduce the agency costs of free cash flow, the authors find that repurchases are positively related to proxies for free cash flow and negatively related to proxies for marginal financing costs. The authors also examine the extent to which management stock options influence the choice between open market repurchases and dividend payments. Because the value of management stock options is negatively related to expected future dividend payments, management can increase the value of its stock options by substituting share repurchases for dividend growth. The authors find evidence that such substitution occurs.

Ferrier, Gary D.

TI Consistency Conditions for Regulatory Analysis of Financial Institutions: A Comparison of Frontier Efficiency Methods. **AU** Bauer, Paul W.; Berger, Allen N.; Ferrier, Gary D.; Humphrey, David B.

Flavin, Marjorie

PD January 1998. **TI** Owner-Occupied Housing and the Composition of the Household Portfolio over the Life Cycle. **AU** Flavin, Marjorie; Yamashita, Takashi. **AA** University of California, San Diego. **SR** University of California, San

Diego, Department of Economics Working Paper: 98/02; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 24. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** D12, D91, E21, G11, R21. **KW** Owner-Occupied Housing. Portfolio Choice. Life-Cycle Saving. Mean-Variance Analysis.

AB The paper studies the impact of the portfolio constraint imposed by the consumption demand for housing (the "housing constraint") on the household's optimal holdings of financial assets. Since the ratio of housing to net worth declines as the household accumulates wealth, the housing constraint induces a life-cycle pattern in the portfolio shares of stocks and bonds. For reasonable degrees of risk aversion, the changes in portfolio composition over the life-cycle can be dramatic. For example, for a coefficient of relative risk aversion of 3, the ratio of stocks to net worth in the optimal portfolio is .09 for the youngest households (ages 18-30) and .60 for the oldest (age 70 and over). Using data from the PSID on home values to construct household level panel data on the real after-tax return to owner-occupied housing, as well as data on the returns to financial assets, the paper estimates the vector of expected returns and the covariance matrix for the set of assets consisting of housing, mortgages, stocks, Treasury bonds, and T-bills. Numerical methods are used to calculate the mean-variance efficient frontier, conditional on different values of the housing constraint, and the optimal portfolios associated with different levels of relative risk aversion.

Forbes, Catherine S.

PD April 1997. **TI** Bayesian Arbitrage Threshold Analysis. **AU** Forbes, Catherine S.; Kalb, Guyonne R. J.; Kofman, Paul. **AA** Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Papers: 03/97; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. **PG** 25. **PR** no charge. **JE** C11, C32, G13. **KW** Bayesian. Vector Autoregression. Error Correction. Non-Linear Threshold. Index Futures.

AB A Bayesian estimation procedure is developed for estimating multiple regime (multiple threshold) vector autoregressive models appropriate for deviations from financial arbitrage relationships. This approach has clear advantages over classical stepwise threshold autoregressive analysis. Whereas classical procedures first have to identify thresholds and then perform piece wise autoregressions, we simultaneously estimate threshold and autoregression parameters. To illustrate the Bayesian procedure, we estimate a non-arbitrage band within which index futures arbitrage is not profitable despite (persistent) deviations from parity.

TI Bayesian Approaches to Segmenting a Simple Time Series. **AU** Oliver, Jonathan J.; Forbes, Catherine S.

Foresi, Silverio

TI Accounting for Biases in Black-Scholes. **AU** Backus, David; Foresi, Silverio; Li, Kai; Wu, Liuren.

TI Predictable Changes in Yields and Forward Rates. **AU** Backus, David; Foresi, Silverio; Mozumdar, Abon; Wu, Liuren.

French, Mark W.

PD December 1997. **TI** Cleaning Up the Errors in the Monthly Employment Situation Report: A Multivariate State-Space Approach. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1998/05; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 16. **PR** no charge. **JE** C32, J21, J22, J23. **KW** Signal Extraction. Kalman Filter. Employment Situation. Labor Markets.

AB This paper estimates the underlying state of the labor market, assuming data in the monthly Employment Situation are contaminated by measurement error and other transient noise. To better filter out unobserved noise, the methodology exploits correlation's among labor- market series. Household employment and labor force have cross- correlated sampling errors; establishment employment and hours-worked may, also. The Kalman Filtering procedure also exploits fundamental economic relationships among these series. Error cross-correlation's and economic relationships shape a multivariate labor-market model where observed variables embody unobserved components: trend, cycle and noise. Maximum-likelihood estimation enables construction of labor series from which noise components have been removed.

Fuchs, Victor R.

PD August 1997. **TI** Why do Economists Disagree About Policy? The Roles of Beliefs about Parameters and Values. **AU** Fuchs, Victor R.; Krueger, Alan B.; Poterba, James M. **AA** Fuchs: National Bureau of Economic Research. Krueger: Princeton University National Bureau of Economic Research. Poterba: Massachusetts Institute of Technology National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6151; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** \$5.00. **JE** A10, D60, H89, J10. **KW** Labor Studies. Public Economics. Policy. Economists.

AB This paper reports the results of surveys of specialists in labor economics and public economics at 40 leading research universities in the United States. Respondents provided opinions of policy proposals; quantitative best estimates and 95% confidence intervals for economic parameters; answers to values questions regarding income redistribution, efficiency versus equity, and individual versus social responsibility; and their political party identification. The authors find considerable disagreement among economists about policy proposals. Their positions on policy are more closely related to their values than to their estimates of relevant economic parameters or to their political party identification. Average best estimates of the economic parameters agree well with the ranges summarized in surveys of relevant literature, but the individual best estimates are usually widely dispersed. Moreover, economists, like experts in many fields, appear more confident of their estimates than the substantial cross-respondent variation in estimates would warrant.

Fullerton, Don

PD July 1997. **TI** Environmental Controls, Scarcity Rents, and Pre-Existing Distortions. **AU** Fullerton, Don; Metcalf, Gilbert E. **AA** Fullerton: University of Texas, Austin and National Bureau of Economic Research. Metcalf:

Tufts University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6091; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 38. **PR** \$5.00. **JE** D62, H21, H23, L51, Q28. **KW** Public Economics. Double Dividend. Environmental Policy. Taxation. Regulation.

AB Debate about the Double Dividend Hypothesis has focused on whether an environmental policy raises revenue that can be used to cut other distorting taxes. This paper shows that this focus is misplaced. The authors derive welfare results for alternative policies in a series of analytical general equilibrium models with clean and dirty goods that might be produced using emissions as well as other resources, in the presence of other pre-existing distortions. The authors show that the same welfare effects of environmental protection can be achieved by taxes that raise revenue, command and control regulations that raise no revenue, and even subsidies that cost revenue. Instead, the pre-existing labor tax distortion is exacerbated by policies that generate privately- retained scarcity rents. These rents raise the cost of production, raise equilibrium output prices, and reduce the real net wage. Such policies include both quantity-restricting command and control policies and certain marketable permit policies.

Gabbard, C. Bryan

TI Space: Emerging Options for National Power. **AU** Johnson, Dana J.; Pace, Scott; Gabbard, C. Bryan.

Galor, Oded

PD January 1998. **TI** Population, Technology, and Growth: From the Malthusian Regime to the Demographic Transition. **AU** Galor, Oded; Weil, David N. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 98/03; Department of Economics, Box B, Brown University, Providence, RI 02912. **PG** 50. **PR** no charge. **JE** J13, J24, O11, O33, O40. **KW** Fertility. Growth. Technological Change. Malthusian Trap. Demographic Transition.

AB This paper develops a unified model of growth, population, and technological progress that is consistent with long-term historical evidence. The economy endogenously evolves through three phases. In the Malthusian regime, population growth is positively related to the level of income per capita. Technological progress is slow and is matched by proportional increases in population, so that output per capita is stable around a constant level. In the post-Malthusian regime, the growth rate of technology and total output increases. Population growth absorbs much of the growth of output, but income per capita does rise slowly. In the Modern Growth regime, population growth is moderate or even negative, and income per capita rises rapidly. Two forces drive the transitions between regimes: First, technological progress is driven both by increases in the size of the population and by increases in the average level of education. Second, technological progress creates a state of disequilibrium.

PD July 1998. **TI** Ability Biased Technological Transition, Wage Inequality and Economic Growth. **AU** Galor, Oded; Moay, Omer. **AA** Galor: Brown University, Hebrew University, and Centre for Economic Policy Research. Moay: Hebrew University. **SR** Brown University, Department of Economics Working Paper: 98/14; Department of Economics, Box B, Brown University,

Providence, RI 02912. **PG** 44. **PR** no charge. **JE** J31, J24, O11, O33, O40. **KW** Growth. Technology. Wage Inequality. Productivity Slowdown.

AB This paper develops a growth model with an endogenous determination of technological change in which the evolution of technological change and wage inequality is consistent with the observed pattern in the United States and several other countries in the last two centuries. The evolution of the economy and its impact on wage inequality is based upon three central elements that appear consistent with empirical evidence. First, the state of transition brought about by technological change raises the return to skills. Second, the increase in the return to skills induces an increase in the supply of educated individuals. Third, an increase in the number of educated individuals increases the rate of technological progress. These three elements generate a dynamic path characterized by a positive feedback loop that permits a rise in the rate of technological progress in a transition to a steady-state equilibrium with a constant positive rate of technological progress.

Ganz, Michael

TI Selection, Marketing, and Medicaid Managed Care. **AU** Glied, Sherry; Sisk, Jane; Gorman, Sheila; Ganz, Michael.

Garrett, A. Brown

PD August 1997. **TI** The Effect of U.S. Supreme Court Ruling *Sullivan v. Zebley* on Child and AFDC Enrollment. **AU** Garrett, A. Brown; Glied, Sherry. **AA** Garrett: University of California, Berkeley. Glied: Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6125; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** \$5.00. **JE** H51, H53, I18, I38, J13. **KW** Health. Public Health. Government Expenditures. AFDC. SSI.

AB In 1990, in the case of *Sullivan v. Zebley*, the United States Supreme Court substantially relaxed the criteria whereby children became eligible for Supplemental Security Income (SSI) benefits. Since the ruling took effect, the number of children covered by SSI has almost tripled. Some new eligibles had already been receiving cash and Medicaid through AFDC. This paper examines the extent of spillovers between the SSI and AFDC programs using the *Sullivan v. Zebley* expansion in child SSI enrollment to identify spillovers between the programs. The authors describe how a family's decision to participate in AFDC or SSI is likely to depend on the level of AFDC and SSI supplementation payments in a state. If the likelihood of SSI participation increases with the net financial gain of SSI relative to AFDC, child SSI participation is likely to be highest in states with low AFDC payments and high state SSI supplementation payments.

Garrett, Daniel M.

TI Education and Saving: The Long-Term Effects of High School Financial Curriculum Mandates. **AU** Bernheim, B. Douglas; Garrett, Daniel M.; Maki, Dean M.

Gaube, Thomas

PD April 1998. **TI** When do Distortionary Taxes Reduce the Optimal Supply of Public Goods? **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich 303

Discussion Paper: A/574; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. **PG** 25.

PR no charge. **JE** H21, H41. **KW** Pigou's Conjecture. Public Goods. Optimal Taxation.

AB It is often argued that the optimal level of public good provision is below the first-best level as long as the government's expenditures have to be financed by distortionary taxes. We examine this hypothesis and show that it is correct if (i) the public good is normal and (ii) all groups of private commodities taxed at different rates are normal and gross substitutes. However, if the gross substitutes assumption is not fulfilled, the conjecture may fail even if the economy is otherwise well behaved. The results hold irrespective of the heterogeneity of households as long as the second-best allocation is distributionally optimal.

PD August 1998. **TI** Distortionary Taxes Preserve the Environment. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/579; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. **PG** 37. **PR** no charge. **JE** H21, H41, Q28. **KW** Environmental Taxation. Public Goods.

AB Recently it became customary to argue that environmental quality, like ordinary public consumption, is crowded out by distortionary taxation. We show that this hypothesis does not hold provided that the marginal revenue of the environmental tax is positive. In this case, under-provision of public goods implies over-provision of environmental quality in second best. Hence, contrary to the impression left by the recent literature, distortionary taxes may actually provide more room for environmental protection than lump-sum taxes.

Gaviria, Alejandro

PD May 1998. **TI** Intergenerational Mobility, Siblings' Inequality and Borrowing Constraints. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 98/13; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 27. **PR** \$3.00

U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** D63, D64, I22, J24. **KW** Human Capital. Parental Altruism. Equal Opportunity. Social Mobility.

AB This paper uncovers differences in social mobility between rich and poor families. The paper shows, in particular, that borrowing constraints retard social mobility among the poor by preventing poor parents from investing optimally in the their children's human capital. This evidence contradicts several recent studies that argue that innate ability is the overriding determinant of socioeconomic success in the United States. The paper also shows that siblings' inequality seems to be independent of family wealth, which clearly contradicts the predictions of most economic models of resource allocation within the family.

PD May 1998. **TI** Increasing Returns and the Evolution of Violent Crime: The Case of Colombia. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 98/14; Working Paper Coordinator, Department of Economics, 0508,

University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG 25. PR \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. JE D62, K42, N46. KW Multiple Equilibria. Crime Dynamics. Externalities. Colombia.

AB This paper puts forth an explanation of the recent escalation of violent crime in Colombia. The paper considers three implicit models that isolate different types of externalities among criminals. In the first model criminals make crime more appealing to nearby residents by congesting the law enforcement system and hence lowering the probability of punishment. In the second model the interaction of career criminals and local crooks speeds up the diffusion of criminal know-how and criminal technology. In the third model the daily contact of youth with criminal adults and criminal peers results in the erosion of morals and hence in a greater predisposition toward crime. The paper shows that a myriad of empirical evidence -- both statistical and anecdotal -- lends support to the previous models in general and to the congestion-in-law-enforcement model in particular.

Gertler, Paul

TI Health Care Prices, Health and Labor Outcomes: Experimental Evidence. AU Dow, Will; Gertler, Paul; Schoeni, Robert F.; Strauss, John; Thomas, Duncan.

Giacomo, Corneo

PD January 1998. **TI** Employers' vs. Employees' Contributions to the Social Security System. AU Giacomo, Corneo; Marquardt, Marko. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/570; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. PG 18. PR no charge. JE E24, H55, J51, J65. KW Public Pensions. Unemployment Insurance. Unemployment. Endogenous Growth. Social Security.

AB The authors develop an overlapping-generations model that highlights the interaction between an unfunded pension system and an unemployment insurance in the presence of a labor market with union wage setting. The social security system is financed by proportional wage taxes levied on firms and their employees. The equilibrium path entails endogenous growth and involuntary unemployment. The contribution rates to the social security system are shown to have no influence on the equilibrium rate of unemployment. The contribution rates exert growth effects, which are negative for the contributions to the pension system and positive for those to the unemployment insurance. The authors investigate whether workers of firms should finance the social security system. While there is no financing method that dominates another one on efficiency grounds, maximizing economic growth requires that only firms finance the unemployment insurance and only workers finance the pension system.

Glied, Sherry

TI The Effect of U.S. Supreme Court Ruling *Sullivan V. Zebley* on Child and AFDC Enrollment. AU Garrett, A. Brown; Glied, Sherry.

PD September 1997. **TI** Selection, Marketing, and Medicaid Managed Care. AU Glied, Sherry; Sisk, Jane;

Gorman, Sheila; Ganz, Michael. AA Glied: Columbia School of Public Health and National Bureau of Economic Research. Sisk, Gorman and Ganz: Columbia School of Public Health. SR National Bureau of Economic Research Working Paper: 6164; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 27. PR \$5.00. JE I11, I12, I18. KW Health Care. Medicaid. Managed Care.

AB In several states, the Medicaid program allows beneficiaries a choice among multiple managed care plans and traditional Medicaid. This paper uses data from a survey of New York City Medicaid beneficiaries enrolled in conventional Medicaid and in five Medicaid managed care plans to examine the effect of plan selection on measures of satisfaction with care, access to a regular source of care, and utilization of ambulatory and emergency room services. The authors use information on health status to evaluate selection on observable characteristics; variation in geographic patterns of enrollment to investigate selection on unobservable characteristics; and survey responses to questions about source of information about a plan to study selection responses to plan marketing. The authors find that managed care enrollees differed from those who remained in traditional Medicaid on both observable and unobservable characteristics. Adjusting for population differences reduced the positive effect of managed care on satisfaction with care.

Goetzl, Alberto

TI Models Needed to Assist in the Development of a National Fiber Supply Strategy for the 21st Century: Report of a Workshop. AU Sedjo, Roger A.; Goetzl, Alberto.

Goldberg, Lawrence G.

TI Youth, Adolescence, and Maturity of Banks: Credit Availability to Small Business in an Era of Banking Consolidation. AU DeYoung, Robert; Goldberg, Lawrence G.; White, Lawrence J.

Goldin, Claudia

PD August 1997. **TI** Why the United States Led in Education: Lessons from Secondary School Expansion, 1910 to 1940. AU Goldin, Claudia; Katz, Lawrence F. AA Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6144; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 28. PR \$5.00. JE H40, I21, I28, N31, N32. KW American Economy. Labor Studies. Education. Economic History. Secondary Schooling.

AB The "second transformation" of United States education -- the growth of secondary schooling -- occurred swiftly in the early 1900's and placed the educational attainment of Americans far ahead of that in other nations for much of the twentieth century. Although the authors motivate the paper with international comparisons, the core of the analysis exploits the considerable cross-state, cross-city, and time-series variation within the United States. The areas of the United States that led in the secondary school education were rich in income and wealth, had high proportions of the elderly, and had relative equality of wealth or income. Given wealth, they also contained a low proportion of jobs in manufacturing and low percentages immigrant and Catholic. Homogeneity of economic and social conditions, and the social stability of

community, given a modicum of income or wealth, also fostered the extension of education to the secondary school level.

Goolsbee, Austan

PD September 1997. TI Taxes, Organizational Form, and the Deadweight Loss of the Corporate Income Tax. AA University of Chicago and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6173; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 10. PR \$5.00. JE H25, L22, N42. KW Public Economics. Corporate Taxation. Organizational Form. Deadweight Loss. Economic History.

AB By changing the relative gain to incorporation, corporate taxation can play an important role in a firm's choice of organizational form. General equilibrium models have shown that substantial shifting of organizational form in response to tax rates implies a large deadweight loss of taxation. This paper estimates the impact of taxes on organizational form using data from 1900-1939. The results indicate that the effect of taxes is significant but small. A corporate rate increase of .10 raises the non-corporate share of capital .002-.03. The implied deadweight loss of the corporate income tax is around 5-10% of revenue.

Gorman, Sheila

TI Selection, Marketing, and Medicaid Managed Care. AU Glied, Sherry; Sisk, Jane; Gorman, Sheila; Ganz, Michael.

Grace, Martin F.

TI Regulatory Solvency Prediction in Property-Liability Insurance: Risk- Based Capital, Audit Ratios, and Cash Flow Simulation. AU Cummins, J. David; Grace, Martin F.; Phillips, Richard D.

Granger, Clive W. J.

PD January 1998. TI Extracting Information from Mega-Panels and High-Frequency Data. AA University of California, San Diego. SR University of California, San Diego, Department of Economics Working Paper: 98/01; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG 21. PR \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. JE C10. KW Large Data Sets. Conditional Distributions. High-Frequency Data.

AB Very large data sets in economics are already available and will soon become commonplace. The econometric techniques currently in use may not be relevant and new techniques will have to be devised. It can be argued that most tests of significance, linear models, assumptions of normality, and procedures to reduce bias, for example, will be replaced. The usefulness of asymptotic theory is discussed. It is suggested that methods for extracting conditional distributions will become especially useful and a few particular possible techniques are suggested.

PD April 1998. TI A Bivariate Causality between Stock Prices and Exchange Rates: Evidence from Recent Asia Flu. AU Granger, Clive W. J.; Huang, Bwo-Nung; Yang, Chin

Wei. AA Granger: University of California, San Diego. Huang: National Chung- Cheng University, Taiwan. Yang: Clarion University of Pennsylvania. SR University of California, San Diego, Department of Economics Working Paper: 98/09; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG 13. PR \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. JE C32, F31, G12, G15. KW Asian Flu. Causality. Stock Prices. Exchange Rates. Unit Root.

AB This paper applies recently developed unit root and cointegration models to determine the appropriate Granger causality relations between stock prices and exchange rates using recent Asian flu data. Coupled with impulse response functions, it is found that data from Japan and Thailand are in agreement with this approach, so that exchange rates leads stock prices with positive correlation. On the other hand, data of Taiwan suggests the result predicted by the portfolio approach: stock prices lead exchange rates with negative correlation. Data from Indonesia, Korea, Malaysia, and the Philippines indicate strong feedback relations while that of Singapore fails to reveal any recognizable pattern.

Green, David

TI Cohort Patterns in Canadian Earnings: Assessing the Role of Skill Premia in Inequality Trends. AU Beaudry, Paul; Green, David.

Green, T. Clifton

TI Economic News and the Yield Curve: Evidence from the U.S. Treasury Market. AU Balduzzi, Pierluigi; Elton, Edwin J.; Green, T. Clifton.

Greenstein, Shane M.

PD August 1997. TI Dynamic Modeling of the Product Life Cycle in the Commercial Mainframe Computer Market, 1968-1982. AU Greenstein, Shane M.; Wade, James B. AA Greenstein: Northwestern University and National Bureau of Economic Research. Wade: University of Illinois. SR National Bureau of Economic Research Working Paper: 6124; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 37. PR \$5.00. JE D20, L11, L63, L81. KW Productivity. Computers. Product Life Cycles. Market Structure.

AB This research investigates product life cycles in the commercial mainframe computer market. We show that empirical studies conducted at the product level are useful for investigating processes underlying product life cycles. We use hazard models with time-varying covariates to estimate the probability of product exit and Poisson models to estimate the probability of introduction. We measure the importance of different aspects of market structure, such as the degree of competitiveness, cannibalization, vintage, product niche and firm effects. We find some evidence of a relationship between the determinants of product exit and product entry.

Gresenz, Carole Roan

PD April 1997. TI An Empirical Investigation of the Role of AFDC Benefits in Location Choice. AA RAND Corporation. SR RAND Corporation Report:

DRU/1611/RC; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. PG 44. PR no charge. JE D31, H53, I38, J13. KW AFDC. Public Welfare. Law. Legislation. Family.

AB This paper examines whether historical differences across states in AFDC benefits affected the location decisions of AFDC recipients and those eligible for AFDC. Two estimation strategies are employed. The first strategy is to ascertain whether in equilibrium and holding all else constant individuals are distributed more heavily in high-benefit states. The second strategy is to analyze the effect of changes in benefits over time on individuals' decisions to change locations. The two empirical strategies yield consistent results. Benefit differentials across states do not appear to shift the equilibrium distribution of individuals toward higher-benefit states and changes in AFDC benefits over time do not significantly affect individuals' decisions to change locations.

Grogger, Jeff

PD May 1997. **TI** The Effect of Welfare Payments on the Marriage and Fertility Behavior of Unwed Mothers: Results from a Twins Experiment. **AU** Grogger, Jeff; Bronars, Stephen G. **AA** Grogger: University of California, Santa Barbara and National Bureau of Economic Research. Bronars: University of Texas. **SR** National Bureau of Economic Research Working Paper: 6047; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 31. PR \$5.00. JE I38, J12, J13. KW Welfare. Twins. Unwed Motherhood. Marriage. Public Economics.

AB The authors study one aspect of the link between welfare and unwed motherhood: the relationship between benefit levels and the time-to-first-marriage and time-to-next-birth among women whose first child was born out of wedlock. The authors use twin births to generate effectively random variation in welfare benefits among mothers within a state, which allows them to control for unobservable characteristics of states that typically confound the relationship between welfare payments and behavior. The twins approach yields evidence that higher base levels of welfare benefits: (1) lead initially unwed white mothers to forestall their eventual marriage; and (2) lead initially unwed black mothers to hasten their next birth. The magnitudes of these effects are small, however. Moreover, the authors find no evidence that the incremental benefit paid upon the birth of an additional child affects fertility.

Groschen, Erica L.

PD June 1997. **TI** Identifying Inflation's Grease and Sand Effects in the Labor Market. **AU** Groschen, Erica L.; Schweitzer, Mark E. **AA** Groschen: Federal Reserve Bank of New York. Schweitzer: Federal Reserve Bank of Cleveland. **SR** National Bureau of Economic Research Working Paper: 6061; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 33. PR \$5.00. JE E24, E31, E52, J31. KW Monetary Policy. Inflation. Wages. Labor Markets. Wage Flexibility.

AB Inflation has been accused of causing distortionary price and wage fluctuations (sand) as well as lauded for facilitating adjustments to shocks when wages are rigid downwards (grease). This paper investigates whether these two effects can be distinguished from each other in a labor market by the

following identification strategy: inflation-induced deviations among employers' mean wage changes represent unintended intramarket distortions (sand), while inflation-induced, inter-occupational wage changes reflect intended alignments with intermarket forces (grease). Using a unique 40-year panel of wage changes made by large mid-western employers, the authors find a wide variety of evidence to support the identification strategy. They also find some indications that occupational wages in large firms gained flexibility in the past four years. These results strongly support other findings that grease and sand effects exist, but also suggest that they offset each other in a welfare sense and in unemployment effects.

Grossman, Herschel I.

PD September 1997. **TI** "Make Us a King": Anarchy, Predation, and the State. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 97/26; Department of Economics, Box B, Brown University, Providence, RI 02912. PG 21. PR no charge. JE D60, D71, H25, L10, P40. KW Anarchy. Predation. Sovereign Power. Taxation.

AB In order to enforce a collective choice to allocate resources to guarding against predators, producers must subject themselves to the state's sovereign power to tax and to spend. But, with these sovereign powers in hand, the state can exploit the producers by taxing and spending for its own purposes. Using a general equilibrium model in which people can choose to be either producers or predators, this paper rationalizes the biblical request, "Make us a king." The analysis shows that, if the technology of predation is sufficiently good, then having a "king" is better for everyone, including both producers and potential predators, than not having a king, even though the king maximizes the consumption of a ruling elite.

PD October 1997. **TI** Predation, Efficiency, and Inequality. **AU** Grossman, Herschel I.; Kim, Minseong. **AA** Grossman: Brown University. Kim: University of Pittsburgh. **SR** Brown University, Department of Economics Working Paper: 97/27; Department of Economics, Box B, Brown University, Providence, RI 02912. PG 17. PR no charge. JE D31, D50, D61, D63, D74. KW Predation. Efficiency. Inequality. Rawls. Consumption.

AB This paper shows how predation breaks the links between an economy's aggregate resource endowment and aggregate consumption and between the interpersonal distribution of endowments and the interpersonal distribution of consumption. The authors construct a general-equilibrium model in which some people (privileged) are well endowed with resources and some (unprivileged) are not and in which each person can choose to be either a producer or a predator. In this model the choice by some people to be predators decreases aggregate consumption. Analyzing this model the authors find that the minimum equilibrium ratio of predators to producers depends only on the technology of predation. In addition, the equilibrium ratio of predators to producers equals its minimum value if and only if the ratio of unprivileged people to privileged people is not larger than this minimum value. These properties imply that the fully egalitarian distribution of resources does not satisfy the Rawlsian criterion.

PD December 1997. **TI** Human Capital and Predation: A Positive Theory of Educational Policy. **AU** Grossman, Herschel I.; Kim, Minseong. **AA** Grossman: Brown University. Kim: University of Pittsburgh. **SR** Brown

University, Department of Economics Working Paper: 97/30; Department of Economics, Box B, Brown University, Providence, RI 02912. PG 25. PR no charge. JE D31, D71, D74, H40, I28. KW Human Capital. Predation. Educational Policy. Redistribution. Collective Choice.

AB This paper offers an explanation for observed differences across countries in educational policies and in resulting interpersonal distributions of human capital. The authors analyze a general- equilibrium model in which some people can be well endowed with human capital, whereas some can not. The authors assume that people can choose to be either producers or predators. An increase in a person's human capital makes predation a less attractive choice for that person. As a result, it is possible that by using some of their human capital to educate the poorly endowed people rather than to produce consumables the well endowed people can increase their own consumption. The authors also find that the nature of the educational policy that maximizes the consumption of the well-endowed people depends on the ability of producers to enforce a collective choice of the amount of resources to be allocated to guarding against predators.

PD March 1998. **TI** Producers and Predators. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 98/06; Department of Economics, Box B, Brown University, Providence, RI 02912. **PG** 23. **PR** no charge. **JE** D50, D61, D71, D74, H40. **KW** Predation. General Equilibrium. Distribution. Social Cost.

AB This paper explores a series of general equilibrium models in which people can choose to be either producers or predators, and in which producers can allocate their resources either to production or to guarding their production against predators. The analysis shows how the ratio of predators to producers and the social cost of predation depend on the technology of predation, on the interpersonal distribution of productive resources, and in a fundamental way on whether the decision to allocate resources to guarding against predators is made individually or collectively.

TI Incentives and Corruption in Chinese Economic Reform. **AU** Fan, C. Simon; Grossman, Herschel I.

PD June 1998. **TI** Scarcity, Abundance, and Appropriative Conflict. **AU** Grossman, Herschel I.; Mendoza, Juan. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 98/12; Department of Economics, Box B, Brown University, Providence, RI 02912. **PG** 17. **PR** no charge. **JE** D23, D74. **KW** Resources. Conflict Scarcity. Abundance Survival. Scarcity.

AB Both common sense and historical examples suggest that resource scarcity causes appropriative conflict as people struggle with each other to avoid hunger and starvation. But, economic intuition, also supported by historical examples, suggests that resource abundance, by giving people more to fight over, causes appropriative conflict. This paper resolves this apparent paradox by developing an economic model in which the allocation of time and effort to appropriative conflict has a minimum at a positive resource endowment and in which both extreme scarcity and extreme abundance cause people to allocate a large fraction of their time and effort to appropriative conflict.

Gruber, Jonathan

PD July 1997. **TI** Physician Fee Policy and Medicaid Program Costs. **AU** Gruber, Jonathan; Adams, Kathleen; Newhouse, Joseph P. **AA** Gruber: Massachusetts Institute of Technology and National Bureau of Economic Research. Adams: Emory University. Newhouse: Harvard Medical School. **SR** National Bureau of Economic Research Working Paper: 6087; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** \$5.00. **JE** H51, I18. **KW** Health Care. Public Economics. Medicaid. Physician Fees.

AB The authors investigate the hypothesis that increasing access for the indigent to physician offices shifts care from hospital outpatient settings and lowers Medicaid costs (the so-called "offset effect"). To evaluate this hypothesis the authors exploit a large increase in physician fees in the Tennessee Medicaid program, using Georgia as a control. They find that beneficiaries shifted care from clinics to offices, but that there was little or no shifting from hospital outpatient departments or emergency rooms. Thus, the authors find no offset effect in outpatient expenditures. Inpatient admissions and expenditures fell, reducing overall program spending eight percent. Because the inpatient reduction did not occur in ambulatory-care-sensitive diagnoses, however, the authors cannot demonstrate a causal relationship with the fee change.

TI Social Security and Retirement in the U.S. **AU** Diamond, Peter; Gruber, Jonathan.

PD August 1997. **TI** Social Security Programs and Retirement Around the World. **AU** Gruber, Jonathan; Wise, David. **AA** Gruber: U.S. Treasury Department and National Bureau of Economic Research. Wise: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6134; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** H55, J14, J21, J22, J26. **KW** Aging. Public Economics. Social Security. Retirement. Employment.

AB The populations in all industrialized countries are aging rapidly and individual life expectancies are increasing. Yet older workers are leaving the labor force at younger and younger ages. This decline in labor force participation magnifies population trends. Together these trends have put enormous pressure on the financial solvency of social security systems around the world. Ironically, the provisions of the social security systems themselves typically contribute to the labor force withdrawal. This paper is a summary of the findings of the evidence in eleven industrialized countries. The authors distill the key conclusions that can be drawn from the collective findings of the individual papers. It is clear that there is a strong correspondence between the age at which benefits are available and departure from the labor force. In addition, the provisions of these programs often imply large financial penalties on labor earnings beyond the social security early retirement age.

Gruber, Martin J.

TI Common Factors in Mutual Fund Returns. **AU** Elton, Edwin J.; Gruber, Martin J.; Blake, Christopher R.

Gruner, Hans Peter

PD September 1998. **TI** Unemployment and Labor

Market Reform: A Contract Theoretic Approach. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/584; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. PG 23. PR no charge. JE D72, D78, E24, E61, J68. KW Unemployment. Labor Market Reform. Political Deadlocks. Contract Theory.

AB The authors study the feasibility of labor market reforms that include the compensation of the insiders for the removal of labor market regulations. In this paper's model workers differ in their ability to perform well on a liberalized labor market. The workers' ability is unobservable for the government. This informational asymmetry generates additional costs for a government that wants to implement a compensation package together with a labor market reform. Under asymmetric information, a reformer who wants to "buy" the approval of voters has to pay them an informational rent in addition to the pure costs of compensation that would arise under symmetric information. In this setting unemployment may be constrained Pareto-efficient. Consequently, no reform is accepted unanimously by voters. The model explains the emergence of political deadlocks where low rates of unemployment can be removed in the political process while high rates of unemployment tend to be politically stable.

Gyarfas, Gabor

TI The Pareto-Improving Transition From a Pay-As-You-Go System to a Fully Funded System in a Model of Endogenous Growth. AU Marquardt, Marko; Gyarfas, Gabor.

Gyourko, Joseph

TI The Tax Treatment of Housing: Its Effects on Bounded and Unbounded Communities. AU Voith, Richard; Gyourko, Joseph.

Haller, Hans

PD January 1998. **TI** A Discrete Model of Discriminatory Price Auctions -- An Alternative to Menezes-Monteiro. AU Haller, Hans; Lengwiler, Yvan. AA Haller: Virginia Polytechnic Institute and State University. Lengwiler: Swiss National Bank and Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1998/08; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 15. PR no charge. JE C72, D44. KW Price Auctions. Mixed Strategies. Equilibrium Existence. Integer Constraints. Game Theory.

AB Menezes and Monteiro, *Math. Soc. Sci.* (1995), show that a multi-unit discriminatory price auction does not have a pure strategy equilibrium unless one imposes some rather special conditions on the demand functions. This non-existence result might indicate a problem either with the underlying auction procedure (as Menezes and Monteiro suggest) or with the modeling approach (as we suggest). We observe that the non-existence problem disappears if bids must come in multiples of smallest units -- a realistic feature. Moreover, we show that most of the analysis can be recast in a discrete action model.

Hanson, Gordon H.

TI Productivity Measurement and the Impact of Trade and Technology on Wages: Estimates for the U.S., 1972-1990.

AU Feenstra, Robert C.; Hanson, Gordon H.

Harrigan, James

PD August 1997. **TI** Estimation of Cross-Country Differences in Industry Production Functions. AA Federal Reserve Bank of New York and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6121; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 27. PR \$5.00. JE C33, D24, F14, O47. KW International Trade. Total Factor Productivity. Production. Technology. Growth.

AB Typically, international trade economists assume that technological knowledge is the same in all countries, and that production processes exhibit constant returns to scale. An equivalent way of stating this assumption is that total factor productivity (TFP) for each industry is the same in every country. This paper is a contribution to a growing body of work, which casts doubt on this hypothesis, finding large and persistent TFP differences across countries. The paper uses a new data set on prices, inputs, and outputs for a group of industrialized countries in the 1980's. In addition to calculating industry-specific TFP indexes over time and across countries, the paper uses panel data econometric techniques to examine the sources of the observed large TFP differences across countries. Two hypotheses are examined to account for TFP differences: constant returns to scale production with country-specific technological differences, and industry-level scale economies with identical technology in each country.

Harris, Mark N.

TI Modelling Export Activity in a Multicountry Economic Area: The APEC Case. AU Matyas, Laszlo; Konya, Laszlo; Harris, Mark N.

PD June 1998. **TI** A Comparison of Alternative Estimators for Binary Panel Probit Models. AU Harris, Mark N.; Macquarie, Lachlan R.; Siouclis, Anthony J. AA Harris: Melbourne University. Macquarie and Siouclis: Monash University. SR Monash Department of Econometrics and Business Statistics Working Papers: 04/98; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. PG 19. PR no charge. JE C15, C23, C25, D12. KW Binary Choice. Panel Data. Consumer Demand. Approximation Methods.

AB Recent advances in computing power have brought the use of computer intensive estimation methods of binary panel data models within the reach of the applied researcher. The aim of this paper is to apply some of these techniques to a marketing data set and compare the results. In addition, their small sample performance is examined via Monte Carlo simulation experiments. The first estimation technique used was maximum likelihood estimation of the cross section probit (ignoring heterogeneity). The remaining techniques estimated the binary panel probit model using: standard maximum likelihood; the Solomon-Cox approximation to this likelihood and finally; the Gibbs sampler to obtain Bayesian estimates. The results suggested that, in most cases, standard maximum likelihood estimation of the binary panel probit model was the preferred technique primarily because it is readily available to applied practitioners. Although when the variance of the heterogeneity term is small, the computational simplicity of the Solomon-Cox approximation may prove attractive. In large

samples, the Gibbs sampler was also found to perform well.

Harris, Richard D. F.

PD March 1997. **TI** Inference for Unit Roots in Dynamic Panels in the Presence of Deterministic Trends. **AU** Harris, Richard D. F.; Tzavalis, Elias. **AA** University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 97/05; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. **Website:** www.ex.ac.uk/~BPearson/Research/DiscussionPapersEcon/DiscussionPapers.html. **PG** 17. **PR** no charge. **JE** C22, C23, F43, G12. **KW** Panel Data. Unit Roots. Fixed Effects. Central Limit Theorem. Score Vector.

AB This paper proposes a similar unit root testing procedure for heterogeneous dynamic panel data, based on the score principle, assuming that the time dimension of the panel is fixed. It is shown that the limiting distribution of the test is standard normal. The similarity with regard to the initial conditions and the heterogeneity (fixed effects) of the panel is achieved by considering a parameterization of the autoregressive model which allows for a trend under both the null and the alternative hypothesis, without introducing any irrelevant variables under either. Simulation evidence suggests that the proposed tests have empirical size that is very close to the nominal 5% level and considerably more power than other panel unit root tests and the corresponding unit root tests for the single time series case. As an application of their test, the authors re-examine whether real dividends and stock prices follow drifting random walks.

TI Tests of the Expectations Hypothesis of the Term Structure in a Model with Bayesian Learning. **AU** Bulkley, George; Harris, Richard D. F.; Weller, Paul.

PD June 1997. **TI** Analyst Optimism and the Magnitude of Earnings Growth. **AA** University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 97/08; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. **Website:** www.ex.ac.uk/~BPearson/Research/DiscussionPapersEcon/DiscussionPapers.html. **PG** 30. **PR** no charge. **JE** C23, D84, G30. **KW** Analyst Forecasts. Earnings Growth. Rational Expectations. Panel Data.

AB This paper evaluates analysts' consensus long run earnings growth forecasts. It is shown that the correlation between forecast earnings growth and actual earnings growth is extremely low. Consistent with other studies, forecast earnings growth is found to be too optimistic. This is illustrated by the fact that almost all earnings growth forecasts are positive, while actual earnings growth is more evenly distributed between positive and negative values. For companies with positive actual earnings growth, there is a strong positive correlation between forecast earnings growth and actual earnings growth. In sharp contrast, for companies with negative actual earnings growth, there is a strong inverse correlation between forecast earnings growth and actual earnings growth. This suggests that analysts are somewhat able to forecast the magnitude of earnings growth but not its sign. Analysts' forecasts of long run earnings growth are shown to be incorporated into the market's expectation of future earnings growth.

PD June 1998. **TI** Inference for Unit Roots in Dynamic Panels with Heteroscedastic and Serially Correlated Errors.

AU Harris, Richard D. F.; Tzavalis, Elias. **AA** University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 98/06; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. **Website:** www.ex.ac.uk/~BPearson/Research/DiscussionPapersEcon/DiscussionPapers.html. **PG** 15. **PR** no charge. **JE** C22, C23, C52. **KW** Panel Data. Unit Roots. Moving Average. Heteroskedasticity. Serial Correlation.

AB In this paper, we introduce a unit root test for dynamic panel data models, allowing for cross-sectional heteroskedasticity and serial correlation in the disturbance term. The limiting distribution of the test statistic is derived under the assumption that the time dimension of the panel is fixed. The test statistic is based on the pooled Least Squares estimator of the autoregressive coefficient of the panel data model, adjusted for the inconsistency that arises due to the serial correlation of the disturbance term. The limiting distribution of the test is normal with a variance that depends on the serial correlation and heteroskedasticity nuisance parameters. The paper examines the consequences of ignoring heteroskedasticity and serial correlation in panel data unit root tests.

PD August 1998. **TI** The Expectations Hypothesis of the Term Structure and Time Varying Risk Premia: a Panel Data Approach. **AA** University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 98/11; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. **Website:** www.ex.ac.uk/~BPearson/Research/DiscussionPapersEcon/DiscussionPapers.html. **PG** 11. **PR** no charge. **JE** C11, E43, E47, G14. **KW** Expectations Hypothesis. Term Structure. Interest Rates. Risk Premia. Panel Data.

AB The expectations hypothesis of the term structure of interest rates implies that the spread between short and long bond yields should forecast next period's change in the long yield. Regression based tests have systematically rejected the expectations hypothesis. One explanation is that regression tests fail to account for time varying risk premia that are correlated with the spread, causing a downward bias in the estimated regression parameters. This paper uses panel data in order to test the expectations hypothesis in the presence of time varying risk premia. It is assumed that risk premia are driven by a single factor and that they are linear in bond maturity. This allows the unobserved time varying risk premia to be captured by time-specific fixed effects in a panel data regression. When risk premia are handled this way, the bias in the estimated coefficient is substantially reduced, although the expectations hypothesis is still rejected.

PD August 1998. **TI** A Test of the Expectations Hypothesis of the Term Structure Using Cross-Section Data. **AA** University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 98/12; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. **Website:** www.ex.ac.uk/~BPearson/Research/DiscussionPapersEcon/DiscussionPapers.html. **PG** 12. **PR** no charge. **JE** C21, E43, E47, G14. **KW** Expectations Hypothesis. Term Structure. Interest Rates. Cross Sectional Models. Risk Premia.

AB Empirical tests of the expectations hypothesis of the term structure have almost always been tests of the time-series

properties of interest rates. However, the expectations hypothesis has implications not just for the yield movement of a single pair of bond maturities over a number of periods, but also for the relationship between yield movements of a number of bond maturities over a single period. This paper tests these implications of the expectations hypothesis using cross-section bond yield data. A long series of monthly cross-section regressions is estimated using zero coupon bond yields for maturities from two months to thirty-five years. The expectations hypothesis is tested using the time-series average of the estimated slope parameter in the cross-section regressions. Both the pure expectations hypothesis and the constant risk premium expectations hypothesis are strongly rejected. However, once allowance is made for a time varying risk premium, the expectations hypothesis cannot be rejected.

Hassett, Kevin A.

TI Measuring the Energy Savings From Home Improvement Investments: Evidence From Monthly Billing Data. **AU** Metcalf, Gilbert E.; Hassett, Kevin A.

TI Inflation, Taxes, and the Durability of Capital. **AU** Cohen, Darrel; Hassett, Kevin A.

Hayashi, Fumio

PD September 1997. **TI** The Main Bank System and Corporate Investment: An Empirical Reassessment. **AA** Tokyo University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6172; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 12. **PR** \$5.00. **JE** E22, G31. **KW** Investment. Banking. Liquidity. Economic Fluctuations. Growth.

AB This paper examines whether the sensitivity of corporate investment to internal funds depends on the firm's access to a main bank, using the sample of Japanese manufacturing firms constructed by Hayashi and Inoue (1991). For either of two classifications of firms by their access to a main bank, there is no evidence that main bank ties mitigate the sensitivity of investment to the firm's liquidity. The large effect of main bank ties reported in Hoshi, Kashyap, and Scharfstein (1991) is most likely due to the relatively poor quality of their capital stock estimate.

Heckman, James J.

PD July 1997. **TI** The Sensitivity of Experimental Impact Estimates: Evidence From the National JTPA Study. **AU** Heckman, James J.; Smith, Jeffrey A. **AA** Heckman: University of Chicago and National Bureau of Economic Research. Smith: University of Western Ontario and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6105; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 39. **PR** \$5.00. **JE** C93, H43, H52, J24, J31. **KW** Labor Studies. Gender. Wages. Human Capital. Job Training.

AB The recent experimental evaluation of the U.S. Job Training Partnership Act (JTPA) program found negative effects of training on the earnings of disadvantaged male youth and no effect on the earnings of disadvantaged female youth. These findings provided justification for Congress to cut the budget of JTPA's youth component by over 80 percent. In this paper, the authors examine the sensitivity of the experimental

impact estimates along several dimensions of construction and interpretation. They find that the statistical significance of the male youth estimates is extremely fragile and that the magnitudes of the estimates for both youth groups are sensitive to nearly all the factors considered. In particular, accounting for experimental control group members who substitute training from other providers leads to a much more positive picture regarding the effectiveness of JTPA classroom training. The authors' study indicates the value of sensitivity analyses in experimental evaluations.

Heller, Daniel

PD January 1998. **TI** The Auctions of Swiss Government Bonds: Should the Treasury Price Discriminate or Not? **AU** Heller, Daniel; Lengwiler, Yvan. **AA** Heller: Swiss National Bank. Lengwiler: Swiss National Bank and Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1998/11; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 12. **PR** no charge. **JE** D44, H63. **KW** Government Bonds. Debt. Auctions. Price Discrimination. Uniform Price.

AB Ever since Friedman's (1960) contribution, there has been an ongoing controversy about whether the Treasury should auction off its government debt with a discriminatory or with a uniform price format. Many industrialized countries, the United States or Germany, for instance, use discriminatory auctions, while Switzerland applies a uniform price rule. Using recent contributions to multi-unit auction theory, we analyze data on the bids submitted to Swiss Treasury bond auctions over the last three years. We then construct hypothetical bid functions that would occur under price discrimination. Based on these bid functions, we determine which auction format minimizes the government's costs of financing its debt.

Helpman, Elhanan

PD July 1997. **TI** R&D and Productivity: The International Connection. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6101; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** F21, F23, O14, O19, O31. **KW** International Trade. Investment. Research and Development. Development. Knowledge Spillovers.

AB Countries differ greatly in R&D spending, and these differences are particularly striking when comparing developed with developing countries. The paper examines the extent to which the benefits of R&D are concentrated in the investing countries. It is argued that significant benefits spill over to other countries in the world. The argument is supported by quantitative estimates of such cross-country effects.

Henderson, Vernon

TI Effects of Air Quality Regulation on Decisions of Firms in Polluting Industries. **AU** Becker, Randy; Henderson, Vernon.

Hendrickson, Michael K.

TI Intra-Planetary, Intra-Continental, and Intra-Planetary PPP. **AU** Engel, Charles; Hendrickson, Michael K.; Rogers,

John H.

Hermalin, Benjamin E.

TI Contract Renegotiation in Agency Problems. AU Edlin, Aaron S.; Hermalin, Benjamin E.

Hernando, Ignacio

TI Does Inflation Harm Economic Growth? Evidence for the OECD. AU Andres, Javier; Hernando, Ignacio.

Hersh, Robert

TI Land Use and Remedy Selection: Experience from the Field -- Abex Site. AU Mazurek, Jan; Hersh, Robert.

TI Land Use and Remedy Selection: Experience from the Field -- The Fort Ord Site. AU Wernstedt, Kris; Hersh, Robert.

TI Basing Superfund Cleanups on Future Land Uses: Promising Remedy or Dubious Nostrum? AU Wernstedt, Kris; Hersh, Robert; Probst, Katherine N.

Hildenbrand, Kurt

PD July 1998. TI On J. M. Grandmont's Modelling of Behavioral Heterogeneity. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/580; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. PG 15. PR no charge. JE D11, D30, D41, E10. KW Aggregate Demand. Aggregation. Behavioral Heterogeneity.

AB J. M. Grandmont claims in his paper "Transformations of the Commodity Space, Behavioral Heterogeneity, and the Aggregation Problem" (1992) to model "behavioral heterogeneity." By a specific parameterization he defines a subset of all demand functions and assumes that the distribution of the parameters is getting more dispersed (increasing flatness of the density function). This increasing dispersedness of the parameters is interpreted as "increasing heterogeneity" of the population of households described by the distribution of demand functions. But, due to the specific parameterization, increasing dispersedness of the parameters leads to an increasing concentration of the demand functions. Therefore, roughly speaking, Grandmont rather models increasing "behavioral similarity."

Hildenbrand, Werner

PD March 1997. TI A Non Parametric Analysis of Distributions of Household Income and Attributes. AU Hildenbrand, Werner; Kneip, Alois; Utikal, Klaus J. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/575; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. PG 21. PR no charge. JE C13, C14, C21, D31, J11. KW Kernel. Density Estimation. Cross Sectional Data. Income Distributions.

AB We study time changes of the distribution of income, age, occupation, household size via their marginal and conditional densities. The data consists of cross sectional samples from the population of British households drawn over the years of 1968-1995. Estimation is carried out non-parametrically and no assumptions on the form of the underlying densities is made.

PD January 1998. TI Schumpeter Lecture: "How Relevant are Specifications of Behavioral Relationships on the Micro-Level for Modelling the Time Path of Population Aggregates?" AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/569; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. PG 23. PR no charge. JE D11, D31, E21. KW Schumpeter. Behavioral Relations. Population Aggregates. Consumption Expenditure. Household Characteristics.

AB Academic economists, in particular the micro theorists among them, have spent an enormous amount of time and effort to model "Individual Behavior", which the author points out has resulted in no satisfactory theory. Much less effort has been spent on modeling the aggregate behavior of large and heterogeneous groups of economic agents, which is the topic of the author's lecture. The author asks the question, "Do we really need an explicit model of individual behavior if we are interested in the aggregate activity of a large and heterogeneous group of economic agents?" The author answers, "Yes," to this question most frequently answered in the negative. He presents a theoretical analysis on aggregation in which he explicitly considers the "individual behavior" aspects of a heterogeneous population. The goal of the study is to model the change over time of aggregate consumption expenditure of a large and heterogeneous population of agents.

PD May 1998. TI Demand Aggregation Under Structural Stability. AU Hildenbrand, Werner; Kneip, Alois. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/560; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. PG 34. PR no charge. JE C43, D11, D31, E10, E21. KW Aggregate Consumption. Aggregation. Structural Stability. Income Distribution. Household Attributes.

AB The goal of this paper is to model the mean (aggregate) consumption expenditure of a large and heterogeneous population of households. The aggregation process is based on assumptions of how the income distribution and the composition of the population evolve over time (structural stability). It is shown that the change in the aggregate consumption expenditure ratio can be decomposed into an effect of changing income dispersion, an effect of income growth, an effect of price-inflation and an effect of changing composition of the population.

Hindriks, Jean

PD September 1998. TI Tax Versus Transfer Competition. AA University of Exeter. SR University of Exeter Department of Economics Discussion Paper: 98/08; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. Website: www.ex.ac.uk/BPearson/Research/Discussion Papers Econ/Discussion Papers.html. PG 22. PR no charge. JE H23, H71, H73, J61. KW Tax Competition. Redistribution. Mobility. Transfers.

AB In a context where both the poor and the rich are (imperfectly) mobile, this paper compares the Nash equilibrium levels of income redistribution from the rich to the poor when jurisdictions compete either in taxes, in transfers or both in taxes and transfers. Although taxes and transfers are linked

through the budget-balanced requirement, the analysis reveals intriguing differences. Indeed, it turns out that transfer competition results in much less redistribution than tax competition, while tax-transfer competition involves an intermediate level of redistribution. In each approach, the mobility of the rich is detrimental to redistribution and an increase in the dependency ratio reduces taxes. Concerning the effect of the mobility of the poor, these approaches reach opposite conclusions. That is, the mobility of the poor is beneficial to redistribution under tax competition but reduces redistribution under transfer competition.

PD September 1998. **TI** Corruption, Extortion and Evasion. **AU** Hindriks, Jean; Keen, Michael; Muthoo, Abhinay. **AA** Hindriks: University of Exeter. Keen: University of Essex, International Monetary Fund, and Institute for Fiscal Studies. Muthoo: University of Essex. **SR** University of Exeter Department of Economics Discussion Paper: 98/09; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. **Website:** www.ex.ac.uk/~BPearson/Research/Discussion Papers Econ/Discussion Papers.html. **PG** 39. **PR** no charge. **JE** D73, D82, H26. **KW** Corruption. Mechanism Design. Evasion. Extortion. Tax Collection.

AB Corruption, evasion and the abuse of power (and the possibility thereof) are pervasive features of economic activity. A prominent instance is tax collection. This paper examines the implications of corruptibility and the potential abuse of authority for the effects and optimal design of (potentially non-linear) tax collection schemes. Amongst the findings are that: the distribution effects of evasion and corruption are unambiguously regressive under the kinds of schemes usual in practice; and collecting progressive taxes without inducing evasion or corruption may require that inspectors be paid commission on high income reports (but not on low), with the cost of this potentially creating what seems to be a previously unnoticed trade-off between equity and efficiency.

Hines, James R., Jr.

TI Inflation in Open Economies. **AU** Desai, Mihir A.; Hines, James R., Jr.

PD July 1997. **TI** Taxed Avoidance: American Participation in Unsanctioned International Boycotts. **AA** University of Michigan Business School and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6116; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **Website:** www.nber.org. **PG** 25. **PR** \$5.00. **JE** F13, F23, H25, H87. **KW** International Trade. Taxation. International Business. Boycotts. Public Economics.

AB American firms are subject to tax and civil penalties for participating in international boycotts (other than those sanctioned by the United States government). These penalties apply primarily to American companies that cooperate with the Arab League's boycott of Israel. The effectiveness of United States anti-boycott legislation is reflected in the fact that American firms comply with only 30 percent of the 10,000 boycott requests they receive annually. The cross-sectional pattern is informative: the United States tax penalty for boycott participation is an increasing function of foreign tax rates, and reported compliance rates vary inversely with tax rates. Tax rate differences of 10 percent are associated with 6 percent

differences in rates of compliance with boycott requests. This evidence suggests that United States anti-boycott legislation significantly reduces the willingness of American firms to participate in the boycott of Israel, reducing boycott participation rates by as much as 15 to 30 percent.

Hodrick, Robert J.

TI "Peso Problem" Explanations for Term Structure Anomalies. **AU** Bekaert, Geert; Hodrick, Robert J.; Marshall, David A.

Hoffman, Elizabeth

PD December 1997. **TI** An Experimental Investigation of the Incentives to Form Agricultural Marketing Pools. **AU** Hoffman, Elizabeth; Libecap, Gary; Shachat, Jason M. **AA** Hoffman: University of Illinois. Libecap: University of Arizona. Shachat: University of California, San Diego. **SR** University of California, San Diego Department of Economics Working Paper: 97/35; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. **Website:** weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 20. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C23, C92, D82, Q13. **KW** Marketing Cooperatives. Experiments. Bayesian-Nash Equilibrium. Risk Attitudes.

AB This paper presents theoretical extensions and laboratory tests of the Hoffman and Libecap (1994) model of individual firm incentives to form agricultural marketing pools. The key incentives are lower variance in output prices and economies of scale in marketing. This paper extends the model by allowing firms to have heterogeneous risk attitudes over uncertain profits via the tools of Bayes-Nash equilibrium. An experimental design is conducted to test the theoretical implications of this model. Statistical analysis of the experimental data using random effects probit models supports the model that incorporates heterogeneous risk attitudes that are private information. Furthermore, the statistical analysis reveals a stylized fact: strategic uncertainty leads to more noise around the Bayes-Nash equilibrium of environments that possess economies of scale for pool participants. This is evidence that economy of scale arguments for pooling may not be as empirically strong as previously believed.

Holzer, Harry J.

TI Are Suburban Firms More Likely to Discriminate Against African-Americans? **AU** Raphael, Steven; Stoll, Michael A.; Holzer, Harry J.

Hooker, Mark A.

PD September 1997. **TI** Misspecification Versus Bubbles in Hyperinflation Data: Monte Carlo and Interwar European Evidence. **AA** Federal Reserve Board. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/49; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. **Website:** www.bog.frb.fed.us/pubs/feds/. **PG** 21. **PR** no charge. **JE** C15, C52, E31, E41. **KW** Hyperinflation. Money Demand. Specification Error. Rational Bubbles. Monte Carlo. **AB** This paper analyzes tests of the Cagan hyperinflation-money demand model which have several advantages relative to those in the literature. They do not confound specification

error with rational bubbles, are implementable with a linear procedure, and are frequently able to detect periodically collapsing bubbles which have challenged existing tests. After a Monte Carlo analysis, the tests are applied to data from hyperinflations in Austria, Germany, Hungary, and Poland. Strong evidence of model misspecification is found for Austria, while the model with a rational, explosive bubble component well-characterizes the Polish data. Inferences for Germany and Hungary are mixed.

PD December 1997. **TI** Exploring the Robustness of the Oil Price-Macroeconomy Relationship. **AA** Federal Reserve Board. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/56; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 20. **PR** no charge. **JE** E32, E37, E52. **KW** Oil Prices. Business Cycles. Fluctuations. Macroeconomy. Granger Causality.

AB This paper reexamines the oil price-macroeconomy relationship with rolling Granger causality and structural stability tests. It finds that the relationship broke down amidst the falling oil prices and market collapse of the 1980's, suggesting misspecification of the oil price rather than a weakened relationship. Some proposed respecifications of the oil price yield considerable improvements, although they are not sufficient to achieve Granger causality of output unless interest rates are excluded from the VAR. There is some support for the explanation that oil prices affect the economy indirectly by inducing monetary policy responses, but this is incomplete and some evidence of misspecification remains.

Horn, Henrik

PD June 1997. **TI** Merger Policies and Trade Liberalization. **AU** Horn, Henrik; Levinsohn, James. **AA** Horn: World Trade Organization, Switzerland. Levinsohn: University of Michigan and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6077; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 36. **PR** \$5.00. **JE** F12, F13, F15, L11, L40. **KW** International Trade. Investment. Mergers. Trade Liberalization. Industrial Concentration.

AB This paper is about the interactions between what is traditionally considered trade policy and a narrow but important aspect of competition policy, namely merger policy. The authors focus on links between merger policies and trade liberalization. They put special emphasis on the topical issue of the role that international agreements such as the GATT play when merger policies are nationally chosen. Of particular concern is the possibility that liberalization of international trade will induce countries to increasingly use competition policies to promote national interests at the expense of others. The authors examine the incentives for a welfare maximizing government to make such a substitution. Interpreting merger policy as a choice of degree of industrial concentration, the authors investigate how the merger policy that is optimal from the point of view of an individual country is affected by restrictions on the use of tariffs and export subsidies.

Hoynes, Hilary Williamson

PD June 1997. **TI** Tax Rates and Work Incentives in the Social Security Disability Insurance Program: Current Law and Alternative Reforms. **AU** Hoynes, Hilary Williamson;

Moffitt, Robert. **AA** Hoynes: University of California, Berkeley and National Bureau of Economic Research. Moffitt: John Hopkins University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6058; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** H24, H55, J14, J22. **KW** Elderly. Taxation. Labor Supply. Social Security. Work Incentives.

AB The Social Security Disability Insurance (SSDI) Program has long been criticized by economists for its apparent work disincentives stemming from the imposition of 100-percent tax rates on earnings. However, the program has been modified in recent years to allow recipients to keep some of their earnings for fixed periods of time. Moreover, additional proposals have been made for lowering the tax rate further and for providing various additional financial work incentives. The authors use the basic labor supply model to show the expected effect of these reforms on work effort. In addition, they provide a numerical simulation that shows the magnitude of the monetary incentives provided by the reforms for different categories of individuals. The authors find that the proposed reforms have ambiguous effects on work effort and could, contrary to perceived wisdom, possibly reduce work effort and increase the number of SSDI recipients.

Huang, Bwo-Nung

TI A Bivariate Causality between Stock Prices and Exchange Rates: Evidence from Recent Asia Flu. **AU** Granger, Clive W. J.; Huang, Bwo-Nung; Yang, Chin Wei.

Huang, Ju Chin

PD February 1997. **TI** Monte Carlo Benchmarks for Discrete Response Valuation Methods. **AU** Huang, Ju Chin; Smith, V. Kerry. **AA** Huang: East Carolina University. Smith: Duke University and Resources for the Future. **SR** Resources for the Future Discussion Paper: 97/23; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 26. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** C15, C42, C93, D12, Q26. **KW** Discrete Response. Contingent Valuation. Monte Carlo. Nonmarket Valuation.

AB This paper argues that the widespread belief that discrete contingent valuation (CV) questions yield substantially larger estimates of the mean (and the median) willingness to pay (WTP) for nonmarket environmental resources in comparison to estimates from open-ended CV questions is unfounded. A set of Monte Carlo experiments estimate the factors influencing the performance of WTP estimates based on discrete response models. Most of the error in the WTP estimates arises from the specification errors that are common in most of the empirical models used in the literature. These experiments suggest models based on choices where WTP is dominated by non use (or passive use) values are likely to have smaller errors than where large use values influence these decisions.

Hughes, Joseph P.

PD October 1997. **TI** Measuring the Efficiency of Capital Allocation in Commercial Banking. **AU** Hughes, Joseph P.; Lang, William; Moon, Choon-Geol; Pagano, Michael S. **AA** Hughes: Rutgers University and Federal Reserve Bank of

Philadelphia. Lang: Office of the Comptroller of the Currency. Moon: Hanyang University. Pagano: Rutgers University. SR Federal Reserve Bank of Philadelphia Research Working Paper: 98/02; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. PG 22. PR no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. JE G21, G31. KW Equity Capital. Demandable Debt. Production Efficiency. Banking. Regulation.

AB This paper examines how banks' employment of capital in their production plans affects their "market value" efficiency. The authors develop a market-based measure of production efficiency and implement it on a sample of publicly traded bank holding companies. Their evidence indicates that banks' efficiency and, hence, the market value of their assets are influenced by the level and allocation of capital. However, even controlling for the effect of size, the authors find that the influence of equity capital differs markedly between banks with higher capital-to-assets ratios and those with lower ratios. For inefficient banks with higher capital-to-assets ratios, marginal increases in capitalization and asset quality boost their market-value efficiency. For inefficient banks with lower levels of capitalization, the signs of these effects are reversed. Controlling for asset size, it appears that less capitalized banks cannot afford to mimic the investment strategy of more capitalized banks.

PD December 1997. TI Measuring Efficiency when Market Prices are Subject to Adverse Selection. AA Rutgers University and Federal Reserve Bank of Philadelphia. SR Federal Reserve Bank of Philadelphia Research Working Paper: 98/03; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. PG 22. PR no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. JE D23, D41, D82, G21, L15. KW Banking. Asymmetric Information. Quality. Risk. Efficiency.

AB In perfectly competitive markets, prices aggregate inputs and outputs into a money metric that allows production plans to be ranked by their profitability. When informational asymmetries in competitive markets lead to adverse selection, prices in these markets assume an additional role that conveys information about product quality. In the case of banking production, quality is linked to risk because prices are linked to credit quality. The problem of efficiency measurement is complicated by the additional role because quality varies with price and price is a decision variable of firms operating in these markets. The effect of these endogenous components of prices on financial performance is illustrated with a production-based model and a market-value model that generate "best-practice" frontiers. These frontiers are not conditioned on prices so they compare the financial performance of firms with different quality-linked prices. Hence, they identify the most efficient pricing strategies as well as production plans.

PD May 1998. TI The Dollar and Sense of Bank Consolidation. AU Hughes, Joseph P.; Lang, William; Mester, Loretta J.; Moon, Choon-Geol. AA Hughes: Rutgers University. Lang: Office of the Comptroller of the Currency. Mester: Federal Reserve Bank of Philadelphia and University of Pennsylvania. Moon: Hanyang University. SR Federal

Reserve Bank of Philadelphia Research Working Paper: 98/10; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. PG 29. PR no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. JE D20, G21, G28, G34. KW Banking. Consolidation. Mergers. Diversification. Efficiency.

AB Rhoades (1996) hypothesizes that the main motivators for the recent record numbers of bank consolidations in the U.S. were increased potential for geographic expansion and a more favorable antitrust climate. To look for evidence of economic incentives, the authors examine how consolidation affects expected profit, the riskiness of profit, profit efficiency, market value, market-value efficiencies, and the risk of insolvency. Their estimates of expected profit, profit risk, and profit efficiency are based on a structural model of leveraged portfolio production that was estimated for a sample of highest-level U.S. bank holding companies in Hughes, Lang, Mester, and Moon (1996). Here, the authors also estimate two additional measures that gauge efficiency in terms of the market values of assets and of equity. Their findings suggest that the economic benefits of consolidation are strongest for those banks engaged in interstate expansion and, in particular, interstate expansion that diversifies banks' macroeconomic risk.

Humphrey, David

TI Consistency Conditions for Regulatory Analysis of Financial Institutions: A Comparison of Frontier Efficiency Methods. AU Bauer, Paul W.; Berger, Allen N.; Ferrier, Gary D.; Humphrey, David B.

Hunt, Jennifer

PD September 1997. TI The Transition in East Germany: When is a Ten Point Fall in the Gender Wage Gap Bad News? AA Yale University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6167; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 22. PR \$5.00. JE J16, J23, J31, J71, P50. KW Labor Studies. Employment. Wages. Labor Demand. Gender.

AB Since monetary union with western Germany, eastern female monthly wages have risen by 10 percentage points relative to male wages, but female employment has fallen 5 percentage points more than male employment. Using the German Socio-Economic Panel to study the years 1990-1994, the author shows that along with age, the wage of a worker in 1990 is the most important determinant of the hazard rate from employment. Differences in mean 1990 wages explain more than half of the gender gap in this hazard rate, since low earners were more likely to leave employment, and were disproportionately female. The withdrawal from employment of low earners can explain 40% of the rise in relative female wages. Competing risks analysis reveals that the wage has its effect through layoffs, and hence through labor demand, which is consistent with the hypothesis that union wage rises have caused the least productive to be laid off.

Hunt, Robert M.

PD December 1998. TI Discouraging Federal Actions that Reduce the Value of Private Property: Evaluating

Procedural and Financial Approaches. AU Hunt, Robert M.; VandenBerg, Tim. AA Hunt: Federal Reserve Bank of Philadelphia. VandenBerg: Congressional Budget Office. SR Federal Reserve Bank of Philadelphia Research Working Paper: 98/24; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. PG 54. PR no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. JE D23, H43, K11. KW Private Property. Regulatory Takings. Just Compensation. Law. Property Value.

AB A regulatory taking occurs when a court concludes that a government action has taken private property for a public use without paying just compensation to the owner. Often, the remedy is a monetary award whose value is determined by the court. In recent years there has been considerable interest in creating a statutory complement to the constitutional law of takings. Some believe that a statutory scheme would discourage federal regulatory activities that reduce the value of privately owned property. The procedural approach would require federal agencies to evaluate the property value effects of proposed actions before undertaking them. The financial approach would require that federal agencies pay from their own budgets for any compensation awards that result from their decisions. This paper compares the existing procedural and financial approaches to the ones proposed. It describes the model of agency incentives and the regulatory environment implicitly assumed by these proposals.

Hynes, Richard

PD February 1998. TI Bankruptcy Exemptions and the Market for Mortgage Loans. AU Hynes, Richard; Berkowitz, Jeremy. AA Hynes: University of Pennsylvania. Berkowitz: Federal Reserve Board. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1998/07; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 29. PR no charge. JE G21, G28, G33, G38. KW Bankruptcy. Mortgages. Credit Markets. Exemptions.

AB The recent explosion in personal bankruptcy filings has motivated research into whether credit markets are being adversely affected by generous legal provisions. Empirically, this question is examined by comparing credit conditions and bankruptcy exemptions across states. We note that the literature has focused on aggregate household credit, making no distinction between secured and unsecured credit. We argue that such aggregation obscures important differences in forms of credit. Most significantly, property exemptions do not prevent the home mortgage creditor from foreclosing on the home if not fully repaid. We argue that some property exemptions may in fact have some beneficial effects for home mortgage lenders. Using both household-level data and state-level data, we show that in the 1990's high exemption levels have tended to reduce mortgage rates and reduce the probability of being denied a mortgage.

Inder, Brett A.

PD October 1997. TI Trend Stability and Structural Change: An Extension to the M1 Forecasting Competition. AU Inder, Brett A.; Snyder, Ralph D. AA Monash University. SR Monash Department of Econometrics and

Business Statistics Working Papers: 09/97; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. PG 14. PR no charge. JE C22, C53, E40. KW Trends. M1. Unit Roots. Exponential Smoothing. Structural Change.

AB The global linear trend with autocorrelated disturbances is a surprising omission from the M1 competition. This approach to forecasting is therefore evaluated using the 51 non-seasonal series from the competition. It is contrasted with a fully optimized version of Holts trend corrected exponential smoothing. It is found that an adaptation of Holts method, in which the growth rate is restricted to be constant, performs almost as well as its traditional counterpart and usually outperforms the global linear trend with autoregressive disturbances. This therefore confirms the results from other studies which indicate that a long-term trend may be missing from many business and economic time series. An implication of this study is that business forecasters, when applying trend corrected exponential smoothing, should explore the possibility of eliminating the second smoothing constant.

TI A General Volatility Framework and the Generalised Historical Volatility Estimator. AU Bollen, Bernard; Inder, Brett A.

Insong, Jang

PD November 1998. TI Nonparametric Analysis of Cross Section Labor Supply Curves. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/586; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. PG 31. PR no charge. JE C14, C21, J22, J31. KW Labor Supply. Local Linear Regression. Wage Elasticity. Wages.

AB This paper studies the cross section labor supply curves of six different groups of workers -- single male and female, married couple with non-working spouse, and married couple with working spouse -- using the 1991 United States Consumer Expenditure Survey. Most existing empirical studies, for the sake of convenience in modeling, assume linear functional form that does not allow the possibility of backward bending behavior. Multivariate local linear regression adopted in this paper shows significant non-linearities and backward bending behavior of the labor supply curve with respect to wage. This might be interpreted as evidence against the possibility of exact aggregation of individual labor supply curves. Besides, it also shows that the elasticity measures of the parametric functions can be quite misleading.

Irwin, Douglas A.

PD July 1997. TI Interests, Institutions, and Ideology in the Republican Conversion to Trade Liberalization, 1934-1945. AU Irwin, Douglas A.; Kroszner, Randall S. AA Irwin: Dartmouth College and National Bureau of Economic Research. Kroszner: University of Chicago. SR National Bureau of Economic Research Working Paper: 6112; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 25. PR \$5.00. JE D72, D78, F13, N72. KW Development. American Economy. International Trade. Economic History. Investment.

AB This paper investigates the factors explaining significant policy change by studying how bipartisan support developed to

sustain the Reciprocal Trade Agreements Act (RTAA) of 1934. The RTAA fundamentally transformed both the process and outcome of United States trade policy: Congress delegated its authority over tariff-setting to the president, and the United States then moved sharply toward trade liberalization. The durability of this change was achieved only when the Republicans, long-time supporters of high tariffs who originally vowed to repeal the RTAA, began to support this Democratic initiative in the 1940's. In seeking to explain this conversion, we find little evidence of an ideological shift among Republicans, but rather an increased sensitivity to export interests for which the institutional structure of the RTAA itself may have been responsible. Our results suggest that analyzing changes in both institutional incentives and economic interests are important for understanding lasting change in economic policy.

Ito, Takatoshi

TI Heterogeneous Expectations and Tests of Efficiency in the Yen/Dollar Forward Exchange Rate Market. **AU** Elliott, Graham; Ito, Takatoshi.

Jacoby, Jacob

TI Distinguishing Better from Poorer Decision Makers: A Study of Risk Propensity in the Face of Gains and Losses. **AU** Morrin, Maureen; Jacoby, Jacob; Venkataramani Johar, Gita; Kuss, Alfred; Mazursky, David.

Jewell, Kevin

TI Auctions and Coalitions: Joint Bidding by Budget Constrained Buyers. **AU** Cho, In-Koo; Jewell, Kevin; Vohra, Rajiv.

Jimenez-Martin, Sergi

TI Social Security and Retirement in Spain. **AU** Boldrin, Michele; Jimenez-Martin, Sergi; Peracchi, Franco.

John, Reinhard

PD October 1998. **TI** Quasimonotone Individual Demand. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/585; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. **PG** 8. **PR** no charge. **JE** C61, D11. **KW** Quasimonotonicity. Demand Theory. Revealed Preferences.

AB Quasimonotone individual demand correspondences are characterized as those, which can be rationalized, in a weak sense, by a complete, upper continuous, monotone, and convex preference relation. Moreover, it is shown that an arbitrary set of demand observations can be rationalized by a reflexive, upper continuous, monotone and convex preference if and only if it is properly quasimonotone.

Johnson, Dana J.

PD August 1998. **TI** Space: Emerging Options for National Power. **AU** Johnson, Dana J.; Pace, Scott; Gabbard, C. Bryan. **AA** RAND Corporation. **SR** RAND Corporation Report: MR/517; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 90. **PR** no charge. **JE** H56, L96. **KW** Military Astronautics. Space Industrialization. Launch Vehicles. World

Politics. United States.

AB This report presents the results of a study conducted in 1993-1994 that examined the extent to which spacepower (both military and economic) will influence national security strategy and the conduct of future military operations. It was updated and revised in 1997 to reflect the changes that have occurred in military space policies, organizations, and operations and in the expanding commercial space sector since 1994. The report attempts to articulate the key military space policy issues facing the United States and place them in the larger context of a changing strategic environment to define new options for the exercise of spacepower in the pursuit of national interests.

Johnson, Paul

TI Pensions and Retirement in the UK. **AU** Blundell, Richard; Johnson, Paul.

Johnson, Richard W.

PD March 1997. **TI** Economic and Cultural Influences on the Decision to Leave Home in Peninsular Malaysia. **AU** Johnson, Richard W.; DaVanzo, Julie. **AA** Johnson: Rutgers University. DaVanzo: RAND Corporation. **SR** RAND Corporation Report: DRU/1589/NIA; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 47. **PR** no charge. **JE** J13, J22, J31, O15. **KW** Parents. Adult Children. Nestleaving. Family. Households.

AB Although the departure of children from the parental home is an important life-cycle event, few studies have investigated nestleaving in developing countries. Using retrospective data from the Second Malaysian Family Life Survey, the authors estimate hazard models of nestleaving in Peninsular Malaysia. The authors find that the departure of children, especially sons, responds to economic incentives, including housing costs, family business, education and economic growth, and that ethnic differences in nestleaving are important. The authors also find that the median age of departure from home has declined sharply over the past forty years, a period of rapid social and economic change in Malaysia.

Jones, Matthew T.

PD July 1997. **TI** Saving, Investment, and Gold: A Reassessment of Historical Current Account Data. **AU** Jones, Matthew T.; Obstfeld, Maurice. **AA** Jones: University of California, Berkeley. Obstfeld: University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6103; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 59. **PR** \$5.00. **JE** E21, E22, F21, F32, N10. **KW** International Finance. International Trade. Investment. Gold Standard. Current Account.

AB This paper revises pre-World War II current account data for thirteen countries by treating gold flows on a consistent basis. The standard historical data sources often fail to distinguish between monetary gold exports, which are capital-account credits, and nonmonetary gold exports, which are current-account credits. The paper also adjusts historical investment data to account for changes in inventories. The revised data are used to construct estimates of saving and investment over the period from 1850 to 1945. The authors'

methodology for removing monetary gold flows from the current account leads to a gold-standard version of the Feldstein-Horioka hypothesis on capital mobility. The regression results are in broad agreement with those of Eichengreen, who found a significantly positive cross-sectional correlation between saving and investment even during some periods when the gold standard prevailed. The authors estimate correlation's between saving and investment that are lower and less significant than those Eichengreen found.

Ju, Jiandong

PD September 1997. TI Evaluating Trade Reform Using Ex-Post Criteria. AU Ju, Jiandong; Krishna, Kala. AA Ju: University of Oklahoma. Krishna: Pennsylvania State University National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6152; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 39. PR \$5.00. JE D60, F02, F13. KW International Trade. Trade Reform. GATT. Free Trade Areas. Welfare.

AB In contrast to existing work, which takes an ex-ante approach and looks for policy prescriptions which yield welfare improvements, we take an ex-post approach. We ask whether there are indicators which show whether welfare has risen or not in the wake of a reform. That is, we look for evidence of welfare improvements in outcome space. Necessary and sufficient conditions for welfare improving trade reform are derived. These conditions are shown to be useful in evaluating Free Trade Areas and in reforming Article XXIV of GATT.

Kaganoff, Tessa

PD January 1998. TI Cost-Cutting in Higher Education: Lessons Learned From Collaboration, Technology, and Outsourcing Initiatives. AA RAND Corporation. SR RAND Corporation Report: DRU/1793/FIHE; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. PG 44. PR no charge. JE H52, I21, I22. KW Higher Education. Education Costs. Cost Containment.

AB There is a growing perception that college costs are increasing at a disproportionately higher rate than the public's ability to pay. In response, colleges and universities are placing greater emphasis on their efforts to contain costs. However, little is known about which methods of cost-cutting are more or less successful and what trade-offs are associated with each. The Foundation for Independent Higher Education (FIHE), with support from the Mellon Foundation, is currently involved in efforts to fund institutional efforts to cut costs; so FIHE asked RAND to review the literature on cost-containment efforts in higher education and compile the "lessons learned" from these efforts. Their hope is that institution-level decision-makers will draw on the experience of others as they plan changes at their own institutions.

Kahn, Lawrence M.

TI Gender and Youth Employment Outcomes: The U.S. and West Germany, 1984-91. AU Blau, Francine D.; Kahn, Lawrence M.

Kalai, Ehud

PD April 1997. TI Repeated Implementation.

AU Kalai, Ehud; Ledyard, John O. AA Kalai: Northwestern University. Ledyard: California Institute of Technology. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1205; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 17. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE C72, C78, D71. KW Implementation. Game Theory. Bargaining Theory. Collective Decision Making.

AB In the traditional static implementation literature it is often impossible for implementors to enforce their optimal outcomes. And when restricting the choice to dominant-strategy implementation, only the dictatorial choices of one of the participants are implementable. Repeated implementation problems are drastically different. In this paper we provide an implementation "folk theorem": for patient implementors, every outcome function they care about is dominant-strategy implementable.

PD March 1998. TI Repeated Implementation. AU Kalai, Ehud; Ledyard, John O. AA Kalai: Northwestern University. Ledyard: California Institute of Technology. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1205R; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 14. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE C72, C78, D71. KW Game Theory. Bargaining Theory. Collective Decision Making. Implementation.

AB See the abstract for Kalai, Ehud; Ledyard, John O., April 1997. "Repeated Implementation". Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper 1205. Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math.

Kalb, Guyonne R. J.

TI Bayesian Arbitrage Threshold Analysis. AU Forbes, Catherine S.; Kalb, Guyonne R. J.; Kofman, Paul.

Kaplan, Steven N.

TI How Costly is Financial (Not Economic) Distress? Evidence from Highly Leveraged Transactions that Became Distressed. AU Andrade, Gregor; Kaplan, Steven N.

Kapteyn, Arie

PD August 1997. TI Social Security and Retirement in the Netherlands. AU Kapteyn, Arie; de Vos, Klaas. AA Tilburg University. SR National Bureau of Economic Research Working Paper: 6135; National Bureau of Economic

Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 31. PR \$5.00. JE H55, J14, J21, J22, J26. KW Aging. Public Economics. Social Security. Retirement. Labor Supply.

AB Compared to other industrialized countries, the labor force participation of the elderly in the Netherlands is very low. Moreover, it has fallen very fast over recent years. We discuss the incentives for employees to retire, arising from public schemes such as social security and disability insurance, and from private arrangements, such as early retirement and occupational pensions. In general, the generous replacement rates offered by these schemes act as powerful stimuli for retirement. Although Dutch research into the retirement effects of the earnings replacing schemes for the elderly was limited until the early nineties, there is now a fast growing literature on this. This literature confirms the findings in the current paper.

Karanikas, Evangelos

PD October 1997. **TI** Tests of Structural Stability of Risk Premia and Returns Relationships. **AU** Karanikas, Evangelos; Tzavalis, Elias. **AA** University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 97/12; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. Website: www.ex.ac.uk/BPearson/Research/DiscussionPapers/Econ/DiscussionPapers.html. PG 15. PR no charge. JE G12, G14, G18. KW Asset Pricing. Fama MacBeth. Cross Section Tests. Recursive Estimation.

AB This paper introduces recursive Fama and MacBeth tests to assess the intertemporal significance and pervasiveness of macroeconomic factors and firm-specific characteristics in explaining the cross-section variation of expected returns in a dynamically changing stock market such as the Athens Stock Exchange. It is shown that the significance of both categories of factors depends on the changes in the macroeconomic conditions, which occurred during the sample period, altering the stock market's perception of the price of risk.

Karceski, Jason

TI The Risk and Return From Factors. **AU** Chan, Louis K. C.; Karceski, Jason; Lakonishok, Josef.

Karoly, Lynn

TI Background and Study Design Report for Policy Evaluation of the Effect of the 1996 Welfare Reform Legislation on SSI Benefits for Disabled Children. **AU** Rogowski, Jeannette; Karoly, Lynn; Klerman, Jacob; Reville, Robert; Inkelas, Moira; Hoube, Jill; Rowe, Melissa; Sastry, Narayan; Hawes-Dawson, Jennifer.

Kashyap, Anil K.

PD June 1997. **TI** What Do a Million Banks Have to Say About the Transmission of Monetary Policy? **AU** Kashyap, Anil K.; Stein, Jeremy C. **AA** Kashyap: University of Chicago and National Bureau of Economic Research. Stein: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6056; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 46. PR \$5.00. JE E51, E52, E58, G21. KW Corporate Finance. Banking. Growth. Monetary Policy. Transmission.

AB In an effort to shed new light on the monetary transmission mechanism, the authors create a panel data set that includes quarterly observations of every insured commercial bank in the United States over the period 1976-1993. Their key cross-sectional finding is that the impact of monetary policy on lending behavior is significantly more pronounced for banks with less liquid balance sheets -- i.e., banks with lower ratios of cash and securities to assets. Moreover, this result is entirely attributable to the smaller banks in the sample, those in the bottom 95% of the size distribution. Among other things, the findings provide strong support for the existence of a "bank lending channel" of monetary policy transmission.

Katz, Lawrence F.

TI Why the United States Led in Education: Lessons from Secondary School Expansion, 1910 to 1940. **AU** Goldin, Claudia; Katz, Lawrence F.

Keen, Michael

TI Corruption, Extortion and Evasion. **AU** Hindriks, Jean; Keen, Michael; Muthoo, Abhinav.

Kelemlı-Ozcan, Sebnem

PD September 1998. **TI** Mortality Decline, Human Capital Investment, and Economic Growth. **AU** Kelemlı-Ozcan, Sebnem; Ryder, Harl E.; Weil, David N. **AA** Kelemlı-Ozcan and Ryder: Brown University. Weil: Brown University and National Bureau of Economic Research. **SR** Brown University, Department of Economics Working Paper: 98/18; Department of Economics, Box B, Brown University, Providence, RI 02912. PG 25. PR no charge. JE I12, I20, J24, O11, O40. KW Mortality. Education. Growth.

AB We examine the role of increased life expectancy in raising human capital investment during the process of economic growth. We develop a continuous time, overlapping generations model, in which individuals make optimal schooling investment choices in the face of a constant probability of death. We present analytic results, followed by results from a calibrated version of the model using realistic estimates of the return of schooling. Mortality decline produces economically significant increases in schooling and consumption. Allowing schooling to vary endogenously produces a much larger response of consumption and capital to mortality decline than is observed when schooling is held fixed.

Keller, Wolfgang

PD June 1997. **TI** Analyzing Spillovers Among Randomly Matched Trade Partners. **AA** University of Wisconsin and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6065; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG not available. PR \$5.00. JE C15, F12, F21, O30, O47. KW Productivity. Research and Development. Knowledge Spillovers. International Trade. Monte Carlo.

AB In this paper, the author analyzes recent findings by Coe and Helpman (1995) on trade-related international R&D spillovers. A Monte Carlo based robustness test is proposed which compares the elasticity of domestic productivity with respect to foreign R&D estimated by Coe and Helpman with an elasticity which is based on counterfactual international trade

patterns. The author shows that also these randomly created trade patterns give rise to positive international R&D spillover estimates, which are larger and explain more of the variation in productivity across countries than if "true" bilateral trade patterns are employed. The finding casts doubt on the claim that patterns of international trade are important in driving R&D spillovers.

PD July 1997. **TI** From Socialist Showcase to Mezzogiorno? Lessons on the Role of Technical Change From East Germany's Post-World War II Growth Performance. **AA** University of Wisconsin and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6079; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** \$5.00. **JE** O31, O32, O47, P21, P24. **KW** Productivity. Growth. Technological Change. Germany. Capital Accumulation.

AB This paper emphasizes the contribution of technical change, broadly defined, towards productivity growth in explaining the relative East Germany-West Germany performance during the post-World War II era. The authors argue that previous work was excessively focused on physical capital investments determining productivity differentials. They show, first, that the rates of technical change in the manufacturing industries of East German states were significantly below those in Western states, helping to account for the fact that East Germany was not the socialist showcase for which it was frequently taken before German reunification. Second, they demonstrate that the rates of technical change in the East German states have been considerably higher than those in the West since German reunification. This suggests that the Mezzogiorno prediction for East Germany, based on an analysis of the need for physical capital accumulation alone, will prove too pessimistic.

PD July 1997. **TI** Trade and the Transmission of Technology. **AA** University of Wisconsin and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6113; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** \$5.00. **JE** F12, F20, O32, O33, O47. **KW** International Trade. Research and Development. Growth. Technology Transfer. Productivity.

AB The authors present a model of R&D-driven growth which predicts that technology, in the form of product designs and created through R&D investments, is transmitted to other domestic and foreign sectors by being embodied in differentiated intermediate goods. Empirical results are presented employing data from thirteen manufacturing industries in eight OECD countries over the period of 1970 to 1991. The authors confirm, first, earlier findings that R&D expenditures are positively related to productivity levels, and estimate an elasticity of TFP with respect to own-industry R&D between 7% and 17%. Second, the receiving industry benefits also from other industries' technology investments. The authors find that the benefit derived from foreign R&D in the same industry is in the order of 50%-95% of the productivity effect of own R&D. Third, for domestic inter-industry technology flows, the results strongly suggest that trade in goods is not all that matters for technology transmission.

Kennickell, Arthur B.

PD November 1997. **TI** Pensions, Social Security, and the Distribution of Wealth. **AU** Kennickell, Arthur B.; Sunden, Annika E. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/55; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 20. **PR** no charge. **JE** D31, E21, H55, J26. **KW** Social Security. Pensions. Retirement. Wealth. Net Worth.

AB For most households, pensions and Social Security are the most important sources of income during retirement, and the promised benefit stream constitutes a sizable fraction of household wealth. This paper uses the Survey of Consumer Finances (SCF) to examine pension coverage, estimate Social Security and pension wealth for U.S. households in 1989 and 1992, and to estimate the effects of pension wealth on non-pension net worth. As expected, the SCF data show that including pensions and Social Security in net worth makes the distribution more even. The analysis of the effects of pension wealth on other types of savings indicates that there is a negative effect of defined benefit plan coverage on non-pension net worth. Surprisingly, the effect of defined contribution plans, such as 401(k) plans, is insignificant. Social Security also has an insignificant effect on non-pension saving.

Keohane, Nathaniel O.

PD February 1997. **TI** The Positive Political Economy of Instrument Choice in Environmental Policy. **AU** Keohane, Nathaniel O.; Revesz, Richard L.; Stavins, Robert N. **AA** Keohane: Harvard University. Revesz: New York University. Stavins: Harvard University and Resources for the Future. **SR** Resources for the Future Discussion Paper: 97/25; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 54. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** H11, K32, Q28. **KW** Environmental Policy. Instruments. Political Economy. Pollution.

AB In the realm of environmental policy instrument choice, there is great divergence between the recommendations of normative economic theory and positive political reality. Market-based policy instruments have only been used to a minor degree, despite their advantages compared with conventional, command-and-control instruments. Pollution-control standards have typically been much more stringent for new than for existing sources, despite the inefficiency of this approach. Also, the few market-based instruments which have been adopted have nearly always taken the form of grandfathered tradable permits, rather than auctioned permits or pollution taxes, despite the advantages these instruments offer in some situations. The political attention given to market-based environmental policy instruments has increased dramatically in recent years. The authors search for explanations for these apparent anomalies by drawing upon intellectual traditions from economics, political science, and law. They find that all fit quite well within an equilibrium framework, based upon the metaphor of a political market. In general, explanations from economics tend to refer to the demand for environmental policy instruments, while explanations from political science refer to the supply side. Overall, the paper finds that there are compelling theoretical

explanations for the apparent anomalies, although these theories have yet to be empirically verified.

Kessler, Anke S.

TI Tiebout and Redistribution in a Model of Residential and Political Choice. **AU** Lulfesmann, Christoph; Kessler, Anke S.

PD January 1998. **TI** Bilateral Bargaining Under Non-Verifiable Information. **AU** Kessler, Anke S.; Lulfesmann, Christoph. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/563; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. **PG** 32. **PR** no charge. **JE** C78, D82, L14, L15. **KW** Bilateral Bargaining. Nonverifiable Information. Quality Choice. Bargaining Theory. Renegotiation.

AB The paper considers an alternating-offers bargaining game between a buyer and a seller who face several trading opportunities (goods). The goods differ in their characteristics (quality) which are observable but non-verifiable. The authors completely characterize the set of sub-game-perfect equilibria for the special case of two goods. Qualitatively different types of equilibrium outcomes occur depending on the parameters of the model: (a) the unique sub-game-perfect equilibrium may entail inefficient trade, (b) the efficiency of the outcome may depend on who moves first in the bargaining process, and (c) multiple equilibria may exist including equilibria with delay in negotiations. As an extension, the authors allow the parties to renegotiate which is shown to re-establish uniqueness and efficiency of equilibrium if the parties are sufficiently patient. Finally, the authors derive a sufficient condition for a unique and efficient equilibrium to exist for the case of a continuum of trading opportunities.

Khandker, Shahidur R.

TI Credit Programs for the Poor and the Nutritional Status of Children in Rural Bangladesh. **AU** Pitt, Mark M.; Khandker, Shahidur R.; Chowdhury, Omar Haider; Millimet, Daniel L.

Kilburn, M. Rebecca

TI Assortative Mating and Family Links in Permanent Earnings. **AU** Lillard, Lee A.; Kilburn, M. Rebecca.

Kim, Jinill

PD September 1997. **TI** Monetary Policy in a Stochastic Equilibrium Model with Real and Nominal Rigidities. **AA** Federal Reserve Board. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1998/02; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 59. **PR** no charge. **JE** E31, E32, E52. **KW** Business Cycles. Real Rigidities. Nominal Rigidities. Monetary Policy. Interest Rates.

AB A dynamic stochastic general-equilibrium (DSGE) model with real and nominal rigidities succeeds in capturing some key nominal features of U.S. business cycles. Additive technology shocks, as well as multiplicative shocks, are introduced. Monetary Policy is specified following the developments in the structural vector autoregression (VAR) literature. Interaction between real and nominal rigidities is essential to reproduce the

liquidity effect of monetary policy. The model is estimated by maximum likelihood on U.S. data, and its fit is comparable to that of an unrestricted first-order VAR. Besides producing reasonable impulse responses and second moments, this model replicates a feature of U.S. business cycles, never captured by previous research with DSGE models, that an increase in interest rates predicts a decrease in output two to six quarters in the future. Finally, some policy implications are discussed.

Kim, Minseong

TI Predation, Efficiency, and Inequality. **AU** Grossman, Herschel I.; Kim, Minseong.

TI Human Capital and Predation: A Positive Theory of Educational Policy. **AU** Grossman, Herschel I.; Kim, Minseong.

King, Maxwell L.

TI Modified Likelihood and Related Methods for Handling Nuisance Parameters in the Linear Regression Model. **AU** Laskar, Mizan R.; King, Maxwell L.

TI Comparisons of Estimators and Tests Based on Modified Likelihood and Message Length Functions. **AU** Laskar, Mizan R.; King, Maxwell L.

TI Comparisons of Estimators and Tests Based on Modified Likelihood and Message Length Functions. **AU** Laskar, Mizan R.; King, Maxwell L.

Kishore, Vellore M.

TI Defaults and Returns on High Yield Bonds: Analysis Through 1997. **AU** Altman, Edward I.; Kishore, Vellore M.

Klerman, Jacob

TI Background and Study Design Report for Policy Evaluation of the Effect of the 1996 Welfare Reform Legislation on SSI Benefits for Disabled Children. **AU** Rogowski, Jeannette; Karoly, Lynn; Klerman, Jacob; Reville, Robert; Inkelas, Moira; Hoube, Jill; Rowe, Melissa; Sastry, Narayan; Hawes-Dawson, Jennifer.

Klibanoff, Peter

PD April 1998. **TI** Stochastic Independence and Uncertainty Aversion. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1212; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 21. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D81. **KW** Uncertainty Aversion. Stochastic Independence. Randomization. Ambiguity.

AB This paper proposes a preference-based condition for stochastic independence of a randomizing device in a product state space. This condition, when imposed on Choquet Expected Utility preferences in a Savage framework displaying uncertainty aversion, results in a collapse to Expected Utility (EU). In contrast, Maxmin EU with multiple priors preferences continue to allow for a very wide variety of uncertainty averse preferences when stochastic independence is imposed. These points are used to reexamine recent arguments against

preference for randomization with uncertainty averse preferences. In particular, these arguments are shown to rely on preferences that do not treat randomization as a stochastically independent event.

TI Maxmin Expected Utility over Savage Acts with a Set of Priors. **AU** Casadesus-Masanell, Ramon; Klibanoff, Peter; Ozdenoren, Emre.

Kneip, Alois

TI A Non Parametric Analysis of Distributions of Household Income and Attributes. **AU** Hildenbrand, Werner; Kneip, Alois; Utikal, Klaus J.

TI Demand Aggregation Under Structural Stability. **AU** Hildenbrand, Werner; Kneip, Alois.

Koehler, Ann B.

TI Prediction Intervals for ARIMA Models. **AU** Snyder, Ralph D.; Ord, J. Keith; Koehler, Ann B.

Kofman, Paul

TI Bayesian Arbitrage Threshold Analysis. **AU** Forbes, Catherine S.; Kalb, Guyonne R. J.; Kofman, Paul.

Kohn, Robert

TI Bayesian Semiparametric Regression: An Exposition and Application to Print Advertising Data. **AU** Smith, Michael S.; Mather, Sharat K.; Kohn, Robert.

TI Estimating Long-Term Trends in Tropospheric Ozone Levels. **AU** Smith, Michael S.; Yau, Paul; Shively, Thomas; Kohn, Robert.

TI Nonparametric Seemingly Unrelated Regression. **AU** Smith, Michael S.; Kohn, Robert.

Kolev, Dobrin R.

PD July 1997. **TI** Tariff Policy for a Monopolist Under Incomplete Information. **AU** Kolev, Dobrin R.; Prusa, Thomas J. **AA** Kolev: Mitchell Madison Group. Prusa: Rutgers University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6090; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** \$5.00. **JE** D82, F13, L12. **KW** International Trade. Tariffs. Monopoly. Asymmetric Information. Protectionism.

AB The authors examine the incentives for a government to levy an optimal tariff on a foreign monopolist. With complete information, the home government uses tariffs to extract rents and therefore implements a policy of discriminatory tariffs entailing higher tariffs on more efficient firms. By contrast if the government is incompletely informed about costs, the authors show that under reasonable conditions the unique self-enforcing outcome involves pooling where firms export the same quantity regardless of efficiency. Due to the distortions created by incomplete information the authors find that, in general, home country welfare is higher under a policy of uniform tariffs than under one of discriminatory tariffs. Their results suggest that trade policies that are motivated by rent extraction are unlikely to be robust to the introduction of incomplete information.

Kongsamut, Piyabha

PD September 1997. **TI** Beyond Balance Growth. **AU** Kongsamut, Piyabha; Rebelo, Sergio; Xie, Danyang. **AA** Kongsamut: University of Rochester. Rebelo: University of Rochester and National Bureau of Economic Research. Xie: Hong Kong University of Science and Technology. **SR** National Bureau of Economic Research Working Paper: 6159; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 32. **PR** \$5.00. **JE** J62, O14, O41. **KW** Economic Fluctuations. Growth. Development.

AB One of the most striking regularities of the growth process is the massive reallocation of labor from agriculture into industry and services. Balanced growth models are commonly used in macroeconomics because they are consistent with the well-known Kaldor facts about economic growth. These models are, however, inconsistent with the structural change dynamics that are a central feature of economic development. This paper discusses models with generalized balanced growth paths. These paths retain some of the key features of balanced growth but are consistent with the observed labor reallocation dynamics.

Konya, Laszlo

TI Modelling Export Activity in a Multicountry Economic Area: The APEC Case. **AU** Matyas, Laszlo; Konya, Laszlo; Harris, Mark N.

TI The Kuznets U-Curve Hypothesis: Some Panel Data Evidence. **AU** Matyas, Laszlo; Konya, Laszlo; Macquarie, Lachlan R.

Kopp, Raymond J.

PD August 1997. **TI** Mock Referenda for Intergenerational Decisionmaking. **AU** Kopp, Raymond J.; Portney, Paul R. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 97/48; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 17. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** D61, D63, H43. **KW** Discounting. Non-Market Valuation. Intergenerational Equity. Contingent Valuation.

AB Traditional applications of benefit-cost analysis make use of what we refer to as the "damage function and discounting" (or DFD) approach. This approach is well suited to the analysis of projects for which the principal benefits and costs occur within the next thirty to forty years, say. However, for projects with significant intergenerational consequences -- i.e., impacts that do not arise for hundreds of years or more -- the DFD approach becomes almost intractable. We propose an alternative conception of benefit-cost analysis for intergenerational decision-making -- the mock referendum -- that is: (i) arguably more consistent with the tenets of modern welfare economics; (ii) more amenable to the analysis of long-term projects or policies; and (iii) consistent with political decision(s) that must be made if climate mitigation (or other long-term environmental protection) measures are to be taken.

Kramarz, Francis

TI Internal and External Labor Markets: An Analysis of Matched Longitudinal Employer-Employee Data. **AU** Abowd, John M.; Kramarz, Francis.

TI The Cost of Hiring and Separations. **AU** Abowd, John M.; Kramarz, Francis.

TI Minimum Wages and Youth Employment in France and the United States. **AU** Abowd, John M.; Kramarz, Francis; Lemieux, Thomas; Margolis, David N.

Krebs, Tom

PD October 1998. **TI** Quitting and Labor Turnover: Microeconomic Evidence and Macroeconomic Consequences. **AU** Krebs, Tom; Maloney, William F. **AA** Krebs: Brown University. Maloney: The World Bank. **SR** Brown University, Department of Economics Working Paper: 98/19; Department of Economics, Box B, Brown University, Providence, RI 02912. **PG** 37. **PR** no charge. **JE** E24, E60, J23, J41, J63. **KW** Efficiency Wages. Employment. Labor Turnover. Macroeconomic Policy. Self Employment.

AB This paper presents an integrated approach to wage and employment determination combining microeconomic evidence with macroeconomic theory. More specifically, we first develop an efficiency wage model with labor turnover and show that the worker's decision problem gives rise to a quit-rate function. We then use microeconomic data to estimate this quit-rate function and to test the specification implied by economic theory. Finally, we incorporate the estimated quit-rate function into the macroeconomic model and use the calibrated model economy to evaluate the quantitative effects of changes in economic policy and other macroeconomic shocks. The microeconomic evidence we present supports the quitting view of labor turnover and the macroeconomic simulation results suggest that persistent macroeconomic shocks have a substantial impact on the wage rate, turnover rate, and employment.

Kremer, Michael

PD July 1997. **TI** Why are Worker Cooperatives so Rare? **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6118; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** \$5.00. **JE** D23, J41, J54. **KW** Labor Studies. Worker Cooperatives. Employment. Redistribution.

AB This paper argues that worker cooperatives are prone to redistribution among members, and that this redistribution distorts incentives. I assume that employment contracts are incomplete. In the model, cooperative members pay in a capital contribution to purchase equipment. They then receive shocks to ability. Each worker's (observable) output depends on ability and on effort, neither of which can be observed separately. After ability is realized, members vote on a wage schedule as a function of output. If the median member has less than average ability, the cooperative will vote for a redistributive schedule, dulling incentives. Whereas workers in firms owned by outside shareholders would quit if the firm redistributed away from them, cooperative members will be reluctant to leave, since this entails forfeiting the dividends on their capital contribution. The model can explain why cooperatives typically have egalitarian wage policies.

TI Does Favorable Tax-Treatment of Housing Reduce Equipment Investment? **AU** Broadbent, Ben; Kremer, Michael.

Krishna, Kala

TI Evaluating Trade Reform Using Ex-Post Criteria. **AU** Ju, Jiandong; Krishna, Kala.

Krishna, Pravin

PD September 1998. **TI** Market Structure, Demand and Endogenous Firm Efficiency. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 98/15; Department of Economics, Box B, Brown University, Providence, RI 02912. **PG** 14. **PR** no charge. **JE** D24, F12, L11, L13, L20. **KW** Market Structure. Demand. Firm Efficiency.

AB In a market of Bertrand firms managed by agents and with non-linear demand, the degree of firm efficiency is shown to be directly related to the number of firms in the market. This supports the conventional wisdom that product market competition disciplines firms into efficiency of operation. However, it stands in sharp contrast to, inter alia, the well known paper by Martin (1993), which arrived at the exact opposite result in a linear Cournot setting. The structure of demand is argued to be crucial.

TI Trade Liberalization and Labor Demand Elasticities: Evidence from Turkey. **AU** Chinoy, Sajjid; Krishna, Pravin; Mitra, Devashish.

Krop, Richard A.

PD March 1998. **TI** The Social Returns to Increased Investment in Education: Measuring the Effect of Education on the Cost of Social Programs. **AA** RAND Corporation. **SR** RAND Corporation Report: RGSD/138; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 193. **PR** no charge. **JE** H51, H52, H53, I21, I28. **KW** Academic Achievement. Education. Human Services. Wages. Blacks.

AB This research estimates the social returns to policies that eliminate the disparities in the educational attainment of whites and that of blacks and Hispanics. It begins by estimating the relationship between educational attainment and the use of a variety of public programs. Individual-level data on program participation rates and annual benefit amounts are used to estimate the relationship between educational attainment and income from public assistance and social insurance programs. Next, a cohort population model is used to estimate the additional amount of schooling required to eliminate the gap between the educational attainment of whites and that of blacks and Hispanics. Finally, this estimate is combined with the estimates of the relationship between educational attainment and that of public spending and revenues to estimate the effect of the elimination of this gap on the cost of government programs and tax revenues.

Kropp, Brian

TI Productivity Change in U.S. Coal Mining. **AU** Darmstadter, Joel; Kropp, Brian.

Kroszner, Randall S.

TI Interests, Institutions, and Ideology in the Republican Conversion to Trade Liberalization, 1934-1945. **AU** Irwin, Douglas A.; Kroszner, Randall S.

Krueger, Alan B.

PD June 1997. **TI** Experimental Estimates of Education Production Functions. **AA** Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6051; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** \$5.00. **JE** I21, J13, J24. **KW** Children. Labor Studies. Class Size. Education. Educational Achievement.

AB This paper analyzes data from Project STAR, an experiment in which 11,600 Tennessee kindergarten students and teachers were randomly assigned to one of three types of classes beginning in the 1985-86 school year: small classes, regular-size classes, and regular-size classes with a teacher's aide. Students in regular-size classes were randomly re-assigned at the end of kindergarten, and about 10 percent of students moved between class types in second and third grade. Attrition was common. The main conclusions are: (1) performance on standardized tests increases by about 4 percentile points the first year students are assigned to small classes; (2) after initial assignment to a small class, student performance increases by about one percentile point per year relative to those in regular-size classes; (3) teacher aides have little effect on student achievement; (4) class size has a larger effect on test scores for minority students and for those on free lunch.

PD August 1997. **TI** Observations and Conjectures on the U.S. Employment Miracle. **AU** Krueger, Alan B.; Pischke, Jorn-Steffen. **AA** Krueger: Princeton University National Bureau of Economic Research. Pischke: Massachusetts Institute of Technology National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6146; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** J21, J23, J31. **KW** Wage Flexibility. Employment. Labor Markets.

AB This paper has three goals. First, to place United States job growth in an international perspective by exploring cross-country differences in employment and population growth. This section finds that the United States has managed to absorb added workers into employment at a greater rate than most countries. The leading explanation for this phenomenon is that the U.S. labor market has flexible wages and employment practices, whereas European labor markets are rigid. The second goal of the paper is to evaluate the labor market rigidities hypothesis. Although greater wage flexibility probably contributes to the U.S.'s comparative success in creating jobs for its population, the slow growth in employment in many European countries appears too uniform across skill groups to result from relative wage inflexibility alone. This leads to the third goal: speculate on other explanations why the U.S. has managed to successfully absorb so many new entrants to the labor market.

TI Why do Economists Disagree About Policy? The Roles of Beliefs about Parameters and Values. **AU** Fuchs, Victor R.; Krueger, Alan B.; Poterba, James M.

Krupnick, Alan J.

TI Efficiency and Political Economy of Pollution Control with Ancillary Benefits: An Application to NOx Control in the Chesapeake Bay Airshed. **AU** Austin, David H.; Krupnick, Alan J.; McConnell, Virginia D.

TI The Costs and Benefits of Reducing Acid Rain. **AU** Burtraw, Dallas; Krupnick, Alan J.; Mansur, Erin; Austin, David H.; Farrell, Deirdre.

Kupiec, Paul H.

PD December 1997. **TI** Deposit Insurance, Bank Incentives, and the Design of Regulatory Policy. **AU** Kupiec, Paul H.; O'Brien, James M. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1998/10; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 49. **PR** no charge. **JE** G21, G28. **KW** Banking. Bank Regulation. Deposit Insurance. Equity Issuance.

AB This study analyzes the efficacy and efficiency of alternative bank regulatory policies within a theoretical framework that is general enough to encompass many issues relevant for policy design. We revisit the existing literature and consider the consequences of generalizing banks' investment and financing opportunities as they relate to the design of bank capital regulation and deposit insurance pricing. When equity issuance is costless, a common modeling assumption, narrow banking costlessly resolves the moral hazard inefficiencies and insurance pricing problems addressed in this literature. When equity issuance is costly, minimum capital requirements can still be effective, but optimal policy design is complicated by its dependence on equity issuance costs, heterogeneous bank investment opportunity sets, and the substantial information requirements that these dependencies create. Incentive-compatible policy mechanisms, while potentially useful in certain circumstances, appear limited in their ability to resolve the information problems.

Kwast, Myron L.

PD October 1997. **TI** Market Definition and the Analysis of Antitrust in Banking. **AU** Kwast, Myron L.; Starr-McCluer, Martha; Wolken, John D. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/52; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 22. **PR** no charge. **JE** G21, G28. **KW** Banking. Mergers. Antitrust. Clusters.

AB The U.S. banking industry is currently experiencing the most significant consolidation in its history, which raises a concern of the potential impact of consolidation on the competitiveness of banking markets. Current procedures for examining the potential competitive effects of bank mergers are based on three fundamental concepts: (1) the "cluster" of bank products, (2) geographically local banking markets, and (3) market structure. This paper attempts to contribute to the debate by utilizing two data sources, the 1992 Survey of Consumer Finances and the 1993 National Survey of Small Business Finances. The paper uses the data sets to examine the extent to which households and small businesses (1) tend to focus their purchases of financial services at insured depository, as opposed to nondepository, institutions, (2) purchase their financial services locally, and (3) tend to cluster their purchases of financial services at a single "primary" financial institution.

PD December 1997. **TI** The Subsidy Provided by the Federal Safety Net: Theory, Measurement and Containment.

AU Kwast, Myron L.; Passmore, S. Wayne. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/58; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 42. **PR** no charge. **JE** G21, G28. **KW** Banking. Safety Net. Financial Institutions. Subsidies. Deposit Insurance.

AB Considerable controversy surrounds the issue of whether the government's commitment to prevent a systemic crisis in the banking system and to protect small depositors by maintaining a federal safety net for insured depository institutions also provides a subsidy to banks. This paper presents an intuitive and analytical model of how the safety net affects banks' cost of funds. Emphasis is placed on distinguishing between fixed and marginal costs in banking, and on the implications of the model for measuring the subsidy. Empirical results strongly suggest that the safety net has benefited banks, and that over recent years bank holding companies have tended to move activities into a bank or a bank subsidiary. We conclude that limiting extension of the safety net subsidy should be a serious concern when designing strategies for expanding bank activities.

Lakonishok, Josef

TI The Risk and Return From Factors. **AU** Chan, Louis K. C.; Karceski, Jason; Lakonishok, Josef.

Lancaster, Tony

PD December 1997. **TI** Orthogonal Parameters and Panel Data. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 97/32; Department of Economics, Box B, Brown University, Providence, RI 02912. **PG** 39. **PR** no charge. **JE** C11, C14, C23. **KW** Panel Data. Bayesian Analysis. Maximum Likelihood. Orthogonal Parameters. Conditional Likelihood.

AB Maximum likelihood estimates of common parameters in panel data models with individual specific fixed effects can be inconsistent as the number of individuals becomes large. This is the incidental parameters problem. Inconsistency of likelihood based procedures can be avoided if inferences about the fixed effects can be separated from inferences about the common parameters, by a reparametrization if necessary. Reparametrization does not change the maximum likelihood estimates of common parameters. But it can change their marginal posterior distributions. In this paper I show how reparametrization of fixed effects to separate them from the common parameters leads to marginal posterior distributions for the latter whose modes provide consistent, likelihood based, inference in two versions of the dynamic regression model. I also characterize the inconsistency of ml estimators in these models and point out that there is no incidental parameter problem in the Poisson panel count data model with multiplicative fixed effects.

PD April 1998. **TI** The Incidental Parameter Problem Since 1948. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 98/09; Department of Economics, Box B, Brown University, Providence, RI 02912. **PG** 27. **PR** no charge. **JE** B23, C13, C51, N01. **KW** Neyman. Consistent Estimates. Incidental Parameter. Economic History. Econometrics.

AB In 1948 *Econometrica* published a paper by the

statistician Jerzy Neyman, and his student Elizabeth Scott, entitled *Consistent Estimates Based on Partially Consistent Observations*. The current paper tries to provide a survey of the "incidental parameter problem", linking the instances of the problem that have been recognized in econometrics with the long-standing discussion of the issue in the statistics literature. The excuse is that the Neyman and Scott paper, which acted as a catalyst to the statistical argument, was published in an econometrics journal. The author briefly reviews the paper and its fate in sections 2 and 3. Section 4 offers his perception of the current state of play with regard to the "incidental parameter problem" in econometrics. Section 5 offers a similar reading of the statistics literature. In section 6 the author examines how current statistical approaches work out when applied to problems that have occupied econometricians.

Landsberg, Hans H.

TI Productivity Growth and the Survival of the U.S. Copper Industry. **AU** Tilton, John E.; Landsberg, Hans H.

Lang, William

TI Measuring the Efficiency of Capital Allocation in Commercial Banking. **AU** Hughes, Joseph P.; Lang, William; Moon, Choon-Geol; Pagano, Michael S.

TI The Dollar and Sense of Bank Consolidation. **AU** Hughes, Joseph P.; Lang, William; Mester, Loretta J.; Moon, Choon-Geol.

Lange, Joe

TI Measuring, Forecasting and Explaining Time Varying Liquidity in the Stock Market. **AU** Engle, Robert F.; Lange, Joe.

Laskar, Mizan R.

PD June 1998. **TI** Modified Likelihood and Related Methods for Handling Nuisance Parameters in the Linear Regression Model. **AU** Laskar, Mizan R.; King, Maxwell L. **AA** Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Papers: 05/98; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. **PG** 37. **PR** no charge. **JE** C13, C20. **KW** Linear Regression. Parameter Orthogonality. Marginal Likelihood. Profile Likelihood. Message Length.

AB In this paper, different approaches to dealing with nuisance parameters in likelihood based inference are presented and illustrated by reference to the linear regression model with nonspherical errors. The estimator of the error variance using each of the approaches is also derived from the linear regression model with spherical errors. We observe that many of these estimators are unbiased. A theoretical comparison of the likelihood functions is reported and we note that some of them are equivalent. Empirical evidence in the literature indicates that estimators based on the conditional profile likelihood and tests based on the marginal likelihood have better small sample properties compared to those based on other likelihood and message length functions.

PD June 1998. **TI** Comparisons of Estimators and Tests Based on Modified Likelihood and Message Length Functions. **AU** Laskar, Mizan R.; King, Maxwell L. **AA** Monash University. **SR** Monash Department of Econometrics and

Business Statistics Working Papers: 06/98. Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. PG 34. PR no charge. JE C12, C13, C15, C20. KW Parameter Orthogonality. Marginal Likelihood. Linear Regression. Likelihood Tests. Monte Carlo.

AB The presence of nuisance parameters causes unexpected complications in econometric inference procedures. A number of modified likelihood and message length functions have been developed for better handling of nuisance parameters but all of them are not equally efficient. In this paper, we empirically compare different modified likelihood and message length functions in the context of estimation and testing of parameters from linear regression disturbances that follow either a first-order moving average or first-order autoregressive error processes. The results show that estimators based on the conditional profile likelihood and tests based on the marginal likelihood are best. If there is a minor identification problem, the sizes of the likelihood ratio and Wald tests based on simple message length functions are best. The true sizes of the Lagrange multiplier tests based on the message length functions are rather poor because the score functions of message length functions are biased.

PD August 1998. TI Comparisons of Estimators and Tests Based on Modified Likelihood and Message Length Functions. AU Laskar, Mizan R.; King, Maxwell L. AA Monash University. SR Monash Department of Econometrics and Business Statistics Working Papers: 11/98; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics. PG 28. PR no charge. JE C12, C13, C15, C20. KW Marginal Likelihood. Conditional Profile. Moving Average. Autoregressive Errors. Message Length.

AB See abstract for Laskar, Mizan R. and King, Maxwell L., June 1998. "Modified Likelihood and Related Methods for Handling Nuisance Parameters in the Linear Regression Model". Monash Department of Econometrics and

Business Statistics Working Paper 05/98. Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia.

Website: www.monash.edu.au/econometrics.

Lebaron, Blake

PD December 1997. TI A Bootstrap Evaluation of the Effect of Data Splitting on Financial Time Series. AU Lebaron, Blake; Weigend, Andreas S. AA LeBaron: University of Wisconsin. Weigend: New York University. SR New York University, Salomon Center, Working Papers: S/97/36; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. PG 8. PR \$5.00 each; \$100.00 yearly subscription. JE C45, C52, G11, G12. KW Model Evaluation. Bootstrap. Resampling. Financial Forecasting. Time Series.

AB This article exposes problems of the commonly used technique of splitting the available data into training, validation, and test sets that are held fixed, warns about drawing too strong conclusions from such static splits, and shows potential pitfalls of ignoring variability across splits.

Using a bootstrap or resampling method, we compare the uncertainty in the solution stemming from the data splitting with neural network specific uncertainties (parameter initialization, choice of number of hidden units, etc.). We present two results on data from the New York Stock Exchange. First, the variation due to different resamplings is significantly larger than the variation due to different network conditions. This result implies that it is important to not over-interpret a model estimated on one specific split of the data. Second, on each split, the neural network solution with early stopping is very close to a linear model; no significant nonlinearities are extracted.

Ledyard, John O.

TI Repeated Implementation. AU Kalai, Ehud; Ledyard, John O.

TI Repeated Implementation. AU Kalai, Ehud; Ledyard, John O.

Leith, Campbell

PD June 1997. TI Interest Rates and the Price Level. AU Leith, Campbell; Warren, Paul; Wren-Lewis, Simon. AA Leith and Wren-Lewis: University of Exeter. SR University of Exeter Department of Economics Discussion Paper: 97/09; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. Website:

www.ex.ac.uk/GBPearson/Research/DiscussionPapers/Econ/DiscussionPapers.html. PG 23. PR no charge.

JE E31, E52, E61, E62, E63. KW Price Level. Interest Rates. Fiscal Policy. Monetary Policy. Debt.

AB Governments have often combined a monetary policy involving setting nominal interest rates with a fiscal policy that did not seek to target a nominal value of the debt stock. In a model with a traditional, backward looking Phillips curve, this fiscal and monetary policy mix may or may not be stable. If it is stable, then higher interest rates will raise the price level in the long run, even if prices fall in the short term. In the forward looking New Keynesian version of the model, stability requires that governments do not over-adjust fiscal policy in response to changes in the level of the real debt stock. Even if fiscal policy made no attempt to target the real debt stock the model would be stable, because prices can jump on to a stable saddle path which ensures debt stability. In this model a temporary increase in interest rates will always raise inflation and the price level in the short run.

Lemieux, Thomas

TI Minimum Wages and Youth Employment in France and the United States. AU Abowd, John M.; Kramarz, Francis; Lemieux, Thomas; Margolis, David N.

TI Adapting to Circumstances: The Evolution of Work, School, and Living Arrangements Among North American Youth. AU Card, David; Lemieux, Thomas.

Lempert, Robert J.

TI The Class of 2014: Preserving Access to California Higher Education. AU Park, George S.; Lempert, Robert J.

Lengwiler, Yvan

TI A Discrete Model of Discriminatory Price Auctions -- An Alternative to Menezes-Monteiro. AU Haller, Hans;

Lengwiler, Yvan.

TI The Auctions of Swiss Government Bonds: Should the Treasury Price Discriminate or Not? **AU** Heller, Daniel; Lengwiler, Yvan.

Levaux, Hugh P.

TI Commercial Power Centers in Emerging Markets. **AU** Treverton, Gregory F.; Levaux, Hugh P.; Wolf, Charles, Jr..

Levine, Robert A.

PD 1998. **TI** Western Europe 1979-2009. A View From the United States. **AA** RAND Corporation. **SR** RAND Corporation Report: MR/1000/OSD/A/AF; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 61. **PR** no charge. **JE** E61, E63, F15, F33, F42. **KW** Western Europe. Political Economy. European Union. Unemployment.

AB Western Europe may be heading for trouble, trouble that can extend to the United States, for which Western Europe remains the most important economic, political, and security partner. What the United States needs in Western Europe is, at best, a strong and equal partner and ally; at worst, a region no less stable than it is now. What it is likely to get is, at best, a Western Europe like the current one; at worst, increasing political as well as economic instability. The sources of the trouble lie in the West European political economy. The imposition of the Maastricht fiscal and monetary criteria for membership in the European Monetary Union has brought about high unemployment and other harsh realities that have proven politically unacceptable in France. If Maastricht's macroeconomic constraints are relaxed then rising unemployment may be reversed in the short run, and conditions can be set for long-run improvement.

Levinsohn, James

TI Merger Policies and Trade Liberalization. **AU** Horn, Henrik; Levinsohn, James.

Li, Carmen A.

PD January 1998. **TI** Inflation and Exchange-Rate Regimes in Mexico. **AU** Li, Carmen A.; Philippopoulos, Apostolis; Tzavalis, Elias. **AA** Li: University of Essex. Philippopoulos: Athens University of Economics and Business and University of Exeter. Tzavalis: University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 98/01; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. Website: www.ex.ac.uk/~BPearson/Research/Discussion Papers Econ/Discussion Papers.html. **PG** 18. **PR** no charge. **JE** E24, E31, E58, F31. **KW** Exchange Rates. Inflation. Employment.

AB We present a version of the exchange-rate regime model of inflation. We then use quarterly data from Mexico during 1946.I-1995.I to test and estimate a simultaneous equation model for wage inflation, price inflation and industrial production. In doing so, we respect the Lucas critique and take into account the statistical properties of the data. The main empirical finding is that after the fall of the fixed exchange-rate regime in 1976, there is a Barro-Gordon type inflation bias

due to the inability of policy-makers to commit to low inflation. There is no significant evidence of political business cycles in inflation.

Li, Kai

TI Accounting for Biases in Black-Scholes. **AU** Backus, David; Foresi, Silverio; Li, Kai; Wu, Liuren.

Li, Zhu-Yu

PD December 1997. **TI** Nonlinear Wavelets Smoothing of Error Distribution in a Semiparametric Model. **AU** Li, Zhu-Yu; Chai, Gen-Xiang; Xu, Ke-Jun. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/567; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. **PG** 23. **PR** no charge. **JE** C14, C51. **KW** Wavelets. Error Density. Semiparametric Models. Nonlinear Wavelets.

AB Consider a semi-parametric model $y_{\text{sub}i} = (x_{\text{sub}i} \text{prime})(\text{Beta}) + g(\text{tsub}_i) + \text{esubi}$, $i = 1, 2, \dots, n$, error esubi are i.i.d. random variables from unknown distribution $f(e)$. In this paper, the authors propose a nonlinear wavelet estimator $\hat{f}(e)$ of $f(e)$ based on residuals $\hat{e} = y_{\text{sub}i} - \hat{y}_{\text{sub}i}$, here restriction of uniformly continuous on $f(e)$ might be avoided. Following the method used in Hall et al (1995), the authors provide an asymptotic formula for the mean integrated squared error of $\hat{f}(e)$. Some numerical examples are given at the end of the paper.

Liang, Nellile

TI Good News and Bad News About Share Repurchases. **AU** Fenn, George W.; Liang, Nellile.

Libecap, Gary

TI An Experimental Investigation of the Incentives to Form Agricultural Marketing Pools. **AU** Hoffman, Elizabeth; Libecap, Gary; Shachat, Jason M.

Lieberman, Offer

PD February 1997. **TI** Strike Data with a Crisis Point. **AA** Israel Institute of Technology. **SR** Monash Department of Econometrics and Business Statistics Working Papers: 02/97; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. **PG** 18. **PR** no charge. **JE** C12, C41, J52. **KW** F-Expansion. Gumbel Distribution. Pseudovariate. Strike Data.

AB The paper is concerned with the analysis of strike data in which the distribution of short strikes differs from that of long strikes. It appears through visual inspection and asymptotic procedures that for Israeli strikes in the years 1965-1992, the hazard function is exponential for strikes lasting less than 40 days and that it is Weibull with a Weibull parameter greater than unity for longer strikes. The economic interpretation of the phenomena is discussed. As there is typically only a small sample of long strikes available (Kiefer 1988), classical asymptotic tests are unlikely to convey the correct message. We suggest a test statistic for the hypothesis that a break does not occur. A new F-based expansion for the small sample distribution of the test is derived. The test rejects the hypothesis of no break for the data under investigation. While conventional approximations to the distribution of the test statistic are shown to break down catastrophically, the F-

expansion appears to be highly accurate.

Lile, Ronald D.

PD November 1996. **TI** An Assessment of the EPA's SO₂ Emission Allowance Tracking System. **AU** Lile, Ronald D.; Bohi, Douglas R.; Burtraw, Dallas. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 97/21; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 18. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** D49, K23, L94, Q25, Q48. **KW** Transaction Costs. Regulated Industries. Electric Utilities. Emissions.

AB On November 8, 1996, Environmental Protection Agency (EPA) officials, scholars and industry representatives gathered at Resources for the Future (RFF) to evaluate the EPA's method for classifying private SO₂ allowance transactions by the Allowance Tracking System (ATS). The ATS provides a central registry of allowance transfers for the purpose of emission compliance. It is unusual as a mechanism for monitoring market activity because it provides information about the buyer and seller of an allowance but does not provide price information. Furthermore, the EPA does not exercise approval of individual allowance trades, and has excluded from consideration options for expanding the EPA's data collection effort. However, the EPA recognizes that the interests of Congress and the public include the development of allowance trading to help achieve environmental goals at the lowest possible cost. In addition, the ATS provides a potential template for the oversight role of the environmental regulator for other potential emission allowance trading programs. Therefore, one goal of the workshop was to assess how well the ATS performs in promoting the development of allowance trading. The paper concludes with recommendations regarding the EPA's current classification methodology.

TI Assessing the Constraints and Opportunities for Private-Sector Participation in Activities Implemented Jointly: Two Case Studies from the US Initiative for Joint Implementation. **AU** Powell, Mark R.; Lile, Ronald D.; Toman, Michael.

Lillard, Lee A.

PD January 1997. **TI** Assortative Mating and Family Links in Permanent Earnings. **AU** Lillard, Lee A.; Kilburn, M. Rebecca. **AA** RAND Corporation. **SR** RAND Corporation Report: DRU/1578/NIA; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 44. **PR** no charge. **JE** D30, J31, J62. **KW** Parents. Salaries. Family. Income. Wages.

AB This paper provides a number of new results regarding the contribution of family background to individual permanent earnings. First, the authors show that sibling correlation's include a gender-neutral family component associated with having the same parents and gender-specific components shared by only same-sex siblings. The magnitude of these sibling links is robust to generalization of the transitory earnings component to an auto-regressive moving average. The measured contribution of parents' earnings to the permanent earnings of their children is quite sensitive to the specification of the transitory earnings component of the parents, which is measurement error in a model of intergenerational links. Accounting for autocorrelation in parents earnings more than doubles the apparent effects of father's permanent earnings on

that of both sons and daughters. Father's and mother's permanent earnings are strongly linked, indicating positive assortative mating. The net direct contribution of mother's permanent earnings on her children is effectively zero.

Livnat, Joshua

TI Individual-Firm Style Loadings, Unrecorded Economic Assets and Systematic Risk. **AU** Ballester, Marta; Livnat, Joshua; Seethamaraju, Chandrakanth.

Lo, Andrew W.

TI Nonparametric Risk Management and Implied Risk Aversion. **AU** Ait-Sahalia, Yacine; Lo, Andrew W.

Lockwood, Ben

TI When Will Capitalist Meet Their Match? The Property Rights Theory of the Firm with Endogenous Timing. **AU** de Meza, David; Lockwood, Ben.

Loewy, Michael B.

TI Free Trade, Growth, and Convergence. **AU** Ben-David, Dan; Loewy, Michael B.

Lowell, Julia

PD November 1998. **TI** The APEC Model of International Economic Cooperation: Assessing its Value to the United States. **AA** RAND Corporation. **SR** RAND Corporation Report: P/8028; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 23. **PR** no charge. **JE** E63, F15, F42, O19. **KW** APEC. International Relations. United States. Asia. Multilateral Institutions.

AB This paper considers the current and potential economic achievements of the Asia-Pacific Economic Cooperation (APEC) forum in light of its costs to the United States. It compares APEC's goals and institutional structure to those of three other multilateral economic institutions: the World Trade Organization, the European Union, and the North American Free Trade Agreement (NAFTA). It concludes that, although limited both in its aims and effectiveness, APEC does serve a useful -- and probably cost-effective -- purpose to the United States.

Lulfesmann, Christoph

PD December 1997. **TI** Tiebout and Redistribution in a Model of Residential and Political Choice. **AU** Lulfesmann, Christoph; Kessler, Anke S. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/566; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. **PG** 24. **PR** no charge. **JE** H41, H71, H73, R20. **KW** Public Goods. Migration. Fiscal Federalism. Jurisdictions.

AB The paper considers a multi-community model with freely mobile individuals, which differ (a) in their incomes and (b) in their tastes for a local public good. In each jurisdiction, the amount of public services is determined by majority vote of the inhabitants, and local spending is financed by a residence-based linear income tax. In making their residential and political choice, individuals thus face a trade-off between the provisionary and redistributive effects of policies. We show that Tiebout-like sorting equilibria exist in this framework, which

contrasts with a recent result by Bolton and Roland (1996). If the spread in tastes among individuals is very large, an almost perfect sorting according to preferences emerges; otherwise, stratification into rich and poor communities are more pronounced. Finally, we demonstrate that sorting equilibria even exist if individuals are allowed to relocate after voting, which gives rise to tax competition aspects.

TI Bilateral Bargaining Under Non-Verifiable Information. **AU** Kessler, Anke S.; Lulfesmann, Christoph.

PD May 1998. **TI** When Should we Privatize? An Incomplete-Contracts Approach. **AA** University of Bonn. **SR** Universität Bonn Sonderforschungsbereich 303 Discussion Paper: A/547; Sonderforschungsbereich 303, Universität Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. **PG** 24. **PR** no charge. **JE** D23, H57, L14, L23, L33. **KW** Privatization. Incomplete Contracts. Innovative Technologies.

AB The paper compares efficiency in public and private enterprises in an incomplete contracting framework. Under each organizational mode, the manager of the firm can invest in the development of an innovative production technology. While this new technology is always efficient, its implementation incurs costs on the manager who therefore prefers a prevailing basic technology. In the case that the basic technology remains viable, a switch in technologies may thus require to re-negotiate the manager's contract. We show that the firm should remain under public governance if it is ex ante unlikely that the basic technology remains viable. Conversely, privatization is optimal in reverse situations. Interestingly, privatization can turn out to be optimal although (a) the government is purely benevolent, (b) the economic environment in either regime is identical, and (c) the government cannot commit ex ante to an ex post inefficient behavior.

PD July 1998. **TI** Partial Monitoring, Managerial Compensation, and the Internal Efficiency of the Firm. **AA** University of Bonn. **SR** Universität Bonn Sonderforschungsbereich 303 Discussion Paper: A/532; Sonderforschungsbereich 303, Universität Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. **PG** 24. **PR** no charge. **JE** D82, H57, J41, L51. **KW** Monitoring. Productive Efficiency. Adverse Selection. Agency Problems.

AB The paper investigates an adverse selection model with monitoring of managerial effort. In contrast to the literature, we assume that the manager can be punished only if his effort is below a certain level that is monitored by the principal. Surprisingly, the optimal labor contract may induce an equilibrium effort which is lower than in the standard model without monitoring. This result holds for any discrete distribution of managerial types. Moreover, we show in the continuous type case that the optimal contracts for high-quality (low-quality) managers are purely output-dependent (effort-dependent).

Lunde, Asger

TI Trades and Quotes: A Bivariate Point Process. **AU** Engle, Robert F.; Lunde, Asger.

PD April 1998. **TI** The Hazards of Mutual Fund Underperformance: A Cox Regression Analysis. **AU** Lunde,

Asger; Timmermann, Allan; Blake, David. **AA** Lunde: University of Aarhus. Timmermann: University of California, San Diego. Blake: University of London. **SR** University of California, San Diego, Department of Economics Working Paper: 98/11; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 19. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C14, C41, G14, G23. **KW** Mutual Funds. Duration Analysis. Cox Regression. Discrete Choice.

AB This paper investigates the process determining mutual funds' conditional probability of closure, i.e. their hazard function. Using a nonparametric approach to estimate the effects of a fund's age on its hazard rate, we find a distinctly nonlinear, inverse U-shaped pattern in the relationship. Hence young and very old funds are least likely to be closed down. A fund's relative performance and (less significantly) the level of return in the sector in which the fund operates are also identified as important factors in the closure decision. Results from semiparametric Cox regressions are compared with those from the discrete choice probit model used by Brown and Goetzmann (1995). Finally, we provide a complete summary of the fund attrition process by estimating the survivor function, indicating the proportion of funds that survive up to a given age, and we identify the effect of fund attrition on standard measures of persistence of fund performance.

Lynch, Anthony W.

PD October 1997. **TI** The Impact of Predictability and Transaction Costs on Portfolio Choice in a Multiperiod Setting. **AU** Lynch, Anthony W.; Balduzzi, Pierluigi. **AA** Lynch: New York University. Balduzzi: Boston College. **SR** New York University, Salomon Center, Working Papers: S/97/44; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. **PG** 28. **PR** \$5.00 each; \$100.00 yearly subscription. **JE** G11, G12. **KW** Transaction Costs. Portfolio Choice. Rebalancing Frequency. Return Predictability.

AB This paper considers the impact of transaction costs on the portfolio decisions of a long-lived agent with isoelastic preferences. In particular, the authors focus on how portfolio choice and rebalancing frequency change over the lifecycle and are affected by return predictability. Two types of costs are evaluated: proportional to the change in the holding of the risky asset and a fixed fraction of portfolio value. There are two major findings. First, the presence of either type of cost greatly affects both the portfolio rebalancing rule and the rebalancing frequency. Second, the introduction of realistic return predictability has a considerable impact on the nature and magnitude of these effects. Even in the absence of return predictability, the portfolio rebalancing rule changes over the lifecycle, with a widening of the no-trade region near the end of an investor's life. Thus, Samuelson's (1969) result, breaks down in the presence of transaction costs.

PD December 1997. **TI** Understanding Fee Structures in the Asset Management Business. **AU** Lynch, Anthony W.; Musto, David K. **AA** Lynch: New York University. Musto: University of Pennsylvania. **SR** New York University, Salomon Center, Working Papers: S/97/43; Salomon Center, Stern School of Business, New York University, 44 West 4th

Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. PG 35. PR \$5.00 each; \$100.00 yearly subscription. JE G13, G23, G24. KW Fees. Money Managers. Investors. Asset Management. AB This paper considers the economic role of fees in aligning the incentives of money managers with those of investors. The authors examine a simple model in which manager effort is observed by the investor prior to her investment decision, but is not verifiable. This setup creates a positive economic role for net asset value (NAV) as a contracting variable and thus provides an explanation for the widespread use of contracts based on NAV in both the mutual and hedge fund industries. The authors also provide an explanation for why hedge funds use asymmetric performance fees while mutual funds typically charge a fixed fraction of NAV (even though "fulcrum" performance fees are available). Put simply, performance fees (asymmetric and "fulcrum") are better able to extract effort than a fee which is a fixed fraction of NAV. The trade-off between inducing effort and risk-sharing is also analyzed.

Lynch, Lisa M.

TI How to Compete: The Impact of Workplace Practices and Information Technology on Productivity. AU Black, Sandra E.; Lynch, Lisa M.

Lyon, Kenneth

TI An Analysis of Global Timber Markets. AU Sohngen, Brent; Mendelsohn, Robert; Sedjo, Roger A.; Lyon, Kenneth.

Ma, Jinpeng

PD September 1998. TI Strategic Formation of Coalitions. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1225; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 24. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE D40, D71, L10. KW Strategy Proof. Core. Von Neumann Morgenstern. Coalition Structures.

AB Consider a society with a finite number of players. Each player has personal preferences over coalitions in which he joins. A social outcome is a coalition structure that is defined by a partition of the set of players. The authors study the strategy proof core and von Neumann and Morgenstern (vN&M) solutions. The roommate problem is a problem in which each coalition contains at most two members. The authors show that if the core is a singleton, then the core mechanism is coalitionally strategy proof. Since a singleton core defines the largest domain of preferences to admit a mechanism that is strategy proof, individually rational and Pareto optimal, the result shows that this largest domain is achieved in the roommate problem. The authors show in an example that a singleton core is manipulable if coalitions contain more than two members (three, say).

MacDonald, Ronald

TI Violations of the "Rules of the Game" and the Credibility of the Classical Gold Standard, 1880-1914. AU Bordo, Michael D.; MacDonald, Ronald.

Machin, Stephen

TI Implications of Skill-Biased Technological Change: International Evidence. AU Berman, Eli; Bound, John; Machin, Stephen.

Macquarie, Lachlan R.

TI The Kuznets U-Curve Hypothesis: Some Panel Data Evidence. AU Matyas, Laszlo; Konya, Laszlo; Macquarie, Lachlan R.

TI A Comparison of Alternative Estimators for Binary Panel Probit Models. AU Harris, Mark N.; Macquarie, Lachlan R.; Siouclis, Anthony J.

Maharaj, Ann

PD November 1997. TI Comparison and Classification of Stationary Multivariate Time Series. AA Monash University. SR Monash Department of Econometrics and Business Statistics Working Paper: 11/97; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. PG 23. PR no charge. JE C32. KW Pattern Recognition. Stationary Series. Multivariate. Classification. Time Series.

AB Time series often have patterns that form a basis for comparing them or classifying them into groups. Pattern recognition of time series arises in a number of practical situations. Procedures for the comparison and classification of univariate stationary series already exist in the literature. A famous application is the comparison and classification of earthquake and nuclear explosion waveforms -- Shumway (1982). In this paper we present procedures to compare and classify stationary multivariate time series. Simulations studies show that the procedures perform fairly well for reasonably long series.

PD November 1997. TI The Comparison of Two or More Stationary Time Series. AA Monash University. SR Monash Department of Econometrics and Business Statistics Working Papers: 12/97; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. PG 40. PR no charge. JE C22. KW Stationary Series. Autoregressive Models. Seemingly Unrelated. Time Series.

AB In this paper we propose a test statistic to compare two or more stationary time series that are not necessarily independent. The test is based on the difference between estimated parameters of the autoregressive models that are fitted to the series.

Maki, Dean M.

TI Education and Saving: The Long-Term Effects of High School Financial Curriculum Mandates. AU Bernheim, B. Douglas; Garrett, Daniel M.; Maki, Dean M.

Maloney, William F.

TI Quitting and Labor Turnover: Microeconomic Evidence and Macroeconomic Consequences. AU Krebs, Tom; Maloney, William F.

Mankiw, N. Gregory

TI Government Debt. AU Elmendorf, Douglas W.; Mankiw, N. Gregory.

Mansfield, Carol

TI Does Nature Limit Environmental Federalism?
AU Smith, V. Kerry; Schwabe, Kurt A.; Mansfield, Carol.

Mansur, Erin

TI The Costs and Benefits of Reducing Acid Rain.
AU Burtraw, Dallas; Krupnick, Alan J.; Mansur, Erin; Austin, David H.; Farrell, Deirdre.

Margolis, David N.

TI Minimum Wages and Youth Employment in France and the United States. **AU** Abowd, John M.; Kramarz, Francis; Lemieux, Thomas; Margolis, David N.

Marjit, Sugata

TI Interregional Migration and Polarisation: A Theoretical Analysis. **AU** Biswas, Debashis; Marjit, Sugata.

Marquardt, Marko

TI Employers' vs. Employees' Contributions to the Social Security System. **AU** Giacomo, Corneo; Marquardt, Marko.

PD November 1998. **TI** Social Security, Unemployment, and Economic Growth. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/587; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. **PG** 19. **PR** no charge. **JE** E24, H55, J41, J64, J65. **KW** Public Pensions. Unemployment Insurance. Unemployment. Efficiency Wages. Endogenous Growth.

AB The interaction of social security (based on the two pillars unemployment insurance and public pension system), unemployment, and economic growth is considered in an overlapping generations model with endogenous growth and efficiency wages. The impact of each worker's and employer's social security contribution rate on unemployment and economic growth is derived. The general equilibrium analysis reveals the astonishing result that the employers' contribution rate to the pension system has either no effect or a positive impact on employment, which contradicts the partial analysis result. Furthermore, for a given financing rule, no alternative Pareto-improving set of contribution rates exists.

PD November 1998. **TI** The Pareto-Improving Transition From a Pay-As-You-Go System to a Fully Funded System in a Model of Endogenous Growth. **AU** Marquardt, Marko; Gyarfas, Gabor. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/588; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. **PG** 8. **PR** no charge. **JE** E21, H55. **KW** Public Pensions. Endogenous Growth. Social Security.

AB In this paper, we investigate the possibilities of Pareto-improving reforms of a pay-as-you-go (PAYG) pension system in a framework of endogenous growth. Belan et al. (1996) propose a transition of a PAYG system to a system of savings-subsidization. We follow this approach and prove that a Pareto-improving conversion from the PAYG system to a fully funded one is possible. Finally, we compare the subsidy system with the fully funded system and analyze the question of whether a PAYG system supplemented by a subsidy scheme can generate the same growth as a fully funded system.

Marshall, David A.

TI "Peso Problem" Explanations for Term Structure Anomalies. **AU** Bekaert, Geert; Hodrick, Robert J.; Marshall, David A.

Martin, Gael M.

PD April 1997. **TI** Private and Public Consumption Expenditure Substitutability: Bayesian Estimates for the G7 Countries. **AU** Martin, Gael M.; Martin, Vance L. **AA** Martin, G.: Monash University. Martin, V.: Melbourne University. **SR** Monash Department of Econometrics and Business Statistics Working Papers: 04/97; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. **PG** 35. **PR** no charge. **JE** C11, C15, C32, E21, H31. **KW** Crowding Out. Bayesian Inference. Jeffreys Prior. Markov Chain. Monte Carlo.

AB The degree of substitution between private and public per capita consumption for the G7 countries is estimated over the period 1960 to 1996. Special attention is given to isolating both long-run and short-run substitution effects. Inferences are produced using a Bayesian methodology, with a Jeffreys prior being used to offset an identification problem in the likelihood function. The marginal posterior densities of interest are estimated via a hybrid of Markov chain Monte Carlo algorithms. The empirical results indicate that for the US, Germany, France and Italy, private and public consumption expenditure are substitutes in the short-run, but complements in the long-run. The opposite result occurs for the UK, whilst Japan and Canada exhibit no significant short-run or long-run relationships.

PD April 1997. **TI** Fractional Cointegration: Bayesian Inferences Using a Jeffreys Prior. **AA** Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Papers: 05/97; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. **PG** 32. **PR** no charge. **JE** C11, C15, C32, F31. **KW** Fractional Cointegration. Bayesian Inference. Jeffreys Prior. Markov Chain. Monte Carlo.

AB The concept of fractional cointegration, whereby deviations from an equilibrium relationship follow a fractionally integrated process, has attracted some attention of late. The extended concept allows cointegration to be associated with mean reversion in the error, rather than requiring the more stringent condition of stationarity. This paper presents a Bayesian method for conducting inference about fractional cointegration. The method is based on an approximation of the exact likelihood, with a Jeffreys prior being used to offset an identification problem. Inferences are based on marginal posterior densities, estimated via a combination of Markov chain Monte Carlo algorithms. The procedure is applied to several purchasing power parity relations, with substantial evidence found in favor of parity reversion.

PD March 1998. **TI** U.S. Deficit Sustainability: A New Approach Based on Multiple Endogenous Breaks. **AA** Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Papers: 01/98; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website:

www.monash.edu.au/econometrics/. PG 28. PR no charge. JE C11, C15, C22, E62, H62. KW Deficit Sustainability. Cointegration. Endogenous Breaks. Markov Chain. Monte Carlo.

AB Recent empirical work has questioned the consistency of U.S. fiscal policy with an intertemporal budget constraint. Empirical results have tended to indicate that the deficit process has undergone at least one structural shift during recent decades, with the deficit becoming either unsustainable or sustainable in only a weak sense in the post-shift period. In this paper, we re-examine sustainability using a new approach, based on a cointegration model with multiple endogenous breaks. A Bayesian methodology is applied, incorporating Markov chain Monte Carlo simulators. In contrast to previous analyses, we find evidence of a sustainable deficit process over the 1947 to 1992 period, despite the occurrence of breaks during the 1970's and 1980's.

Martin, Vance L.

TI Private and Public Consumption Expenditure Substitutability: Bayesian Estimates for the G7 Countries. AU Martin, Gael M.; Martin, Vance L.

Mather, Sharat K.

TI Bayesian Semiparametric Regression: An Exposition and Application to Print Advertising Data. AU Smith, Michael S.; Mather, Sharat K.; Kohn, Robert.

Matsuyama, Kiminori

PD November 1996. TI Growing Through Cycles. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1203; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 43. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE E32, F43, O40. KW Endogenous Growth. Business Fluctuations. Dynamical Systems. Innovation. Factor Accumulation.

AB This paper puts the neoclassical and neo-Schumpeterian growth models in a unified framework. In doing so, it is argued that these two views of growth, one based on factor accumulation and the other based on innovation, are complementary in that they may capture different phases of a single growth experience. In the models presented here, the economy achieves sustainable growth through cycles, perpetually moving back and forth between two phases, under an empirically plausible condition. One phase is characterized by higher output growth, higher investment, no innovation and a competitive market structure. The other phase is characterized by lower output growth, lower investment, high innovation, and a more monopolistic market structure. Both investment and innovation are essential in sustaining growth indefinitely, and yet only one of them appears to play a dominant role in each phase.

TI Efficiency and Equilibrium with Dynamic Increasing Aggregate Returns Due to Demand Complementarities. AU Ciccone, Antonio; Matsuyama, Kiminori.

Matyas, Laszlo

PD March 1997. TI Modelling Export Activity in a Multicountry Economic Area: The APEC Case. AU Matyas, Laszlo; Konya, Laszlo; Harris, Mark N. AA Matyas: Monash University and Budapest University of Economics. Konya: Victoria University of Technology. Harris: University of Melbourne. SR Monash Department of Econometrics and Business Statistics Working Papers: 01/97; Department of Econometrics & Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. PG 11. PR no charge. JE C23, F17. KW Gravity Model. Panel Data. Trade Flows. Fixed Effects. APEC Countries.

AB The gravity model has long been used for modeling and predicting trade flows. This paper generalizes the gravity model allowing for proper representation of local and target country effects and also the business cycle(s). The new approach is based on a panel data framework (instead of a simple cross sectional or time series approach) where the additional information available from using both types of data is utilized to properly model all the specific effects. The model is then estimated for a panel of APEC countries.

PD May 1997. TI The Kuznets U-Curve Hypothesis: Some Panel Data Evidence. AU Matyas, Laszlo; Konya, Laszlo; Macquarie, Lachlan R. AA Matyas: Monash University & Budapest University of Economics. Konya: Victoria University of Technology. Macquarie: Monash University. SR Monash Department of Econometrics and Business Statistics Working Papers: 07/97; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. PG 13. PR no charge. JE C23, D31, O11, O15. KW Kuznets' Hypothesis. Income Inequality. Panel Data. Fixed Effects. Random Effects.

AB In this paper Kuznets' U-curve hypothesis is tested on two unbalanced panel data sets of 47 and 62 countries, for the period 1970-93, using two-way fixed and random effects models. Several competing model specifications are estimated and the one best fitting the data is selected by appropriate model selection procedures. It is shown that there is no hard empirical evidence to support the usual econometric model formulations and the U-curve hypothesis.

Mazurek, Jan

PD July 1997. TI Land Use and Remedy Selection: Experience from the Field -- Abex Site. AU Mazurek, Jan; Hersh, Robert. AA Resources for the Future. SR Resources for the Future Discussion Paper: 97/26; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. PG 24. PR Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. JE Q24, Q28, R52. KW Superfund. Land Use. Environmental Cleanup.

AB As the United States Congress debates revisions to the federal Superfund law, one of the most important topics of discussion is the degree to which cleanups at Superfund sites should be based on their expected future land use. Despite apparent interest in linking cleanup with land use, surprisingly little analysis has been done on what role land use already plays in selecting remedies. Resources for the Future (RRF) researchers have addressed the shortfall with case studies at three Superfund sites -- Abex Corporation in Portsmouth,

Virginia, Industri-Plex in Woburn, Massachusetts, and Fort Ord near Monterey, California -- where land use has played a prominent role in the remedy selection process. Each of the case studies includes a description of: the contamination at the site; the different stakeholders involved in the remedy selection process; and the influence that land use considerations have had on this process. The three case studies are part of a larger research project funded in part by the U.S. Environmental Protection Agency. The final report for that project, *Linking Land Use and Superfund Cleanups: Uncharted Territory*, is available from RFF's publications office (202-328-5000) or on RFF's web page (www.rff.org).

McConnell, Virginia D.

TI Efficiency and Political Economy of Pollution Control with Ancillary Benefits: An Application to NO_x Control in the Chesapeake Bay Airshed. **AU** Austin, David H.; Krupnick, Alan J.; McConnell, Virginia D.

McCorriston, S.

PD June 1997. **TI** The Non-Neutrality of Border Tax Adjustments for Environmental Taxes Under Imperfect Competition. **AU** McCorriston, S.; Sheldon, I. M. **AA** McCorriston: University of Exeter. Sheldon: Ohio State University. **SR** University of Exeter Department of Economics Discussion Paper: 97/10; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. Website: [www.ex.ac.uk/~BPEARSON/Research/Discussion Papers Econ/Discussion Papers.html](http://www.ex.ac.uk/~BPEARSON/Research/Discussion%20Papers/Econ/Discussion%20Papers.html). **PG** 11. **PR** no charge. **JE** F13, H87, L13, Q28, Q38. **KW** Environmental Taxes. Border Taxes. Imperfect Competition. Oligopoly. Competitive Advantage.

AB The appropriate treatment of imports is an important issue in the design and administration of domestic environmental taxes. With the aim of ensuring that foreign exporters do not attain a competitive advantage, border tax adjustments for domestic environmental taxes are used to neutralize this potential advantage. Since most environmental taxes apply to intermediate goods, the relevant border tax adjustment applies to the final imported good. However, when both the intermediate and final goods markets are oligopolistic, border tax adjustments are likely to be non-neutral. This paper shows that the form and level of the appropriate border tax adjustment will depend on the nature of firms' strategies in both the upstream and downstream stages. When firms follow Bertrand strategies, the appropriate border adjustment should be an import subsidy rather than a tax. When firms play Cournot setting the import tax equal to the domestic environmental tax is likely to restore neutrality.

McGarry, Kathleen

PD September 1997. **TI** Pensions and the Distribution of Wealth. **AU** McGarry, Kathleen; Davenport, Andrew. **AA** McGarry: University of California, Los Angeles and National Bureau of Economic Research. Davenport: University of California, Los Angeles. **SR** National Bureau of Economic Research Working Paper: 6171; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 16. **PR** \$5.00. **JE** D31, H55, J14, J26. **KW** Aging. Wealth Distribution. Retirement. Social Security. **AB** Despite the enormous gains in the economic well being

of the elderly, and the progressivity of the Social Security benefit schedule, there remains substantial inequality in financial resources. In this paper, the authors use data from the Health and Retirement Survey to examine the distribution of pension wealth in relation to other private wealth. They pay particular attention to differences by sex and race. They find that men are approximately 50 percent more likely to have pensions than are women. Differences by race are smaller than differences by sex, but are still significant. The authors find further that pension wealth is slightly more equally distributed than is other private wealth, however, adding pension wealth to net worth has only small effects on overall inequality, and these effects are distributed unequally across groups. The paper also describes the assumptions necessary to calculate pension wealth from the data available in the HRS.

PD March 1998. **TI** Social Security, Economic Growth, and the Rise in Independence of Elderly Widows in the 20th Century. **AU** McGarry, Kathleen; Schoeni, Robert F. **AA** McGarry: University of California, Los Angeles and National Bureau of Economic Research. Schoeni: RAND Corporation. **SR** RAND Corporation Report: DRU/1825/NIA; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 26. **PR** no charge. **JE** H55, J12, J14, J26. **KW** Widows. Aged Women. Housing. Social Security. Retirement Income.

AB The share of elderly widows living alone rose from 18 percent in 1940 to 62 percent in 1990, while the share living with adult children declined from 59 percent to 20 percent. This study analyzes the causes of this change and finds that income growth, in particular increased Social Security Benefits, was the single most important factor causing the change in living arrangements, accounting for nearly two-thirds of the rise in the share of elderly widows living alone. Changes in benefits from the mean-tested OAA/SSI programs had a lesser impact on the decision to live alone but were a significant factor in explaining changes in the living arrangements of the poorest widows. Furthermore, contrary to recent work, the study finds no arrangements became stronger over the period; income had a substantial positive effect on the propensity to live alone as early as the 1940's and 1950's.

McKelvey, Richard D.

PD December 1997. **TI** An Experimental Study of the Effect of Private Information in the Coase Theorem. **AU** McKelvey, Richard D.; Page, Talbot. **AA** McKelvey: California Institute of Technology. Page: Brown University. **SR** Brown University, Department of Economics Working Paper: 97/31; Department of Economics, Box B, Brown University, Providence, RI 02912. **PG** 25. **PR** no charge. **JE** C78, C92, D62, D74, D82. **KW** Coase Theorem. Bargaining. Private Information. Incomplete Information. Game Theory.

AB This paper investigates, in an experimental setting, the effect of private information on the Coase theorem's predictions of efficiency and allocative neutrality. For a two-person bargaining game, we find significantly more inefficiency and allocative asymmetry in the case of private information compared with the case of complete information. We also find substantial bargaining breakdown, which is not predicted by the Coase theorem. For the case of private information, the Coase theorem does not predict as well as a generalized version of the Myerson-Satterthwaite theorem, which predicts inefficiency,

allocative non-neutrality in the direction of the disagreement point, and some bargaining breakdown.

Meara, Ellen

TI The Medical Costs of the Young and Old: A Forty Year Perspective. AU Cutler, David M.; Meara, Ellen.

Mendelsohn, Robert

TI An Analysis of Global Timber Markets. AU Sohngen, Brent; Mendelsohn, Robert; Sedjo, Roger A.; Lyon, Kenneth.

Mendelson, Haim

TI Postponement and Information in a Supply Chain. AU Anand, Krishnan S.; Mendelson, Haim.

Mendoza, Juan

TI Scarcity, Abundance, and Appropriative Conflict. AU Grossman, Herschel I.; Mendoza, Juan.

Mester, Loretta J.

TI The Dollar and Sense of Bank Consolidation. AU Hughes, Joseph P.; Lang, William; Mester, Loretta J.; Moon, Choon-Geol.

TI The Dollar and Sense of Bank Consolidation. AU Hughes, Joseph P.; Lang, William; Mester, Loretta J.; Moon, Choon-Geol.

TI Deposits and Relationship Lending. AU Berlin, Mitchell; Mester, Loretta J.;

TI Deposits and Relationship Lending. AU Berlin, Mitchell; Mester, Loretta J.;

Metcalfe, Gilbert E.

PD June 1997. TI Measuring the Energy Savings From Home Improvement Investments: Evidence From Monthly Billing Data. AU Metcalfe, Gilbert E.; Hassett, Kevin A. AA Metcalfe: Tufts University and National Bureau of Economic Research. Hassett: Board of Governors of the Federal Reserve System. SR National Bureau of Economic Research Working Paper: 6074; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 39. PR \$5.00. JE E22, Q41, Q48. KW Public Economics. Energy. Home Improvement.

AB An important factor driving energy policy over the past two decades has been the "Energy Paradox," the perception that consumers apply unreasonably high hurdle rates to energy saving investments. The authors explore one possible explanation for this apparent puzzle: that realized returns fall short of the returns promised by engineers and product manufacturers. Using a unique data set, the authors find that the realized return to attic insulation is statistically significant, but the median estimate (12.3 percent) is close to a discount rate for this investment implied by a CAPM analysis. They conclude that the case for the Energy Paradox is weaker than has previously been believed.

TI Environmental Controls, Scarcity Rents, and Pre-Existing Distortions. AU Fullerton, Don; Metcalfe, Gilbert E.

Mezrich, Joseph

TI Correlations and Volatilities of Asynchronous Data.

AU Burns, Patrick; Engle, Robert F.; Mezrich, Joseph.

Miller, Nolan H.

PD September 1998. TI The Equivalence of Price and Quantity Competition with Incentive Scheme Commitment. AU Miller, Nolan H.; Pazgal, Amit. AA Miller: Northwestern University. Pazgal: Washington University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1224; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 21. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE D43, D82, J50, L13, L21. KW Duopoly. Owners. Managers. Agency Problems. Incentives.

AB We consider a two stage differentiated products duopoly model (with linear demand and constant marginal cost). In the first stage profit maximizing owners choose incentive schemes in order to induce their managers to exhibit a certain type of behavior. In the second stage the managers compete either in prices or in quantities. In contrast to Singh and Vives (1984), we show that if the owners have sufficient power to manipulate the incentives of their managers, the equilibrium outcome is the same regardless of whether the firms compete in prices or in quantities. Basing the manager's objective function on a convex combination of own profit and the difference between own profit and the rival firm's profit is sufficient for the equivalence result to hold.

Ming, Xing

TI Moment-Based Estimation of Latent Class Models of Event Counts. AU Deb, Partha; Ming, Xing; Trivedi, Pravin K.

Mishkin, Frederic S.

PD August 1997. TI Strategies for Controlling Inflation. AA Federal Reserve Bank of New York and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6122; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 32. PR \$5.00. JE E31, E52. KW Monetary Policy. Economic Fluctuations. Inflation. Growth. Exchange Rates.

AB This paper examines what strategies policy makers have used to both reduce and control inflation. It first outlines why a consensus has emerged that inflation needs to be controlled. Then it examines four basic strategies: exchange rate pegging, monetary targeting, inflation targeting, and the "just do it strategy" of preemptive monetary policy with no explicit nominal anchor. The discussion highlights the advantages and disadvantages of each strategy and sheds light not only on how disinflation might best be achieved, but also how hard won gains in lowering inflation can be locked in.

PD August 1997. TI Inflation Targeting: Lessons from Four Countries. AU Mishkin, Frederic S.; Posen, Adam S. AA Mishkin: Federal Reserve Bank of New York and National Bureau of Economic Research. Posen: Federal Reserve Bank of New York. SR National Bureau of Economic Research Working Paper: 6126; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 121. PR \$5.00.

JE E31, E52, E61. **KW** Economic Fluctuations. Inflation. Monetary Policy. Targeting. Transparency.

AB In recent years, a number of central banks have announced numerical inflation targets as the basis for their monetary strategies. After outlining the reasons why such strategies might be adopted in the pursuit of price stability, this study examines the adoption, operational design, and experience of inflation targeting as a framework for monetary policy in the first three countries to undertake such strategies -- New Zealand, Canada, and the United Kingdom. It also analyzes the operation of the long-standing German monetary targeting regime, which incorporated many of the same features as later inflation- targeting regimes. The key challenge for all these monetary frameworks has been the appropriate balancing of transparency and flexibility in policy-making. The study finds that all of the targeting countries examined have maintained low rates of inflation and increased the transparency of monetary policy-making without harming the real economy through policy rigidity in the face of economic developments.

Mitra, Devashish

TI Trade Liberalization and Labor Demand Elasticities: Evidence from Turkey. **AU** Chinoy, Sajjid; Krishna, Pravin; Mitra, Devashish.

Moay, Omer

TI Ability Biased Technological Transition, Wage Inequality and Economic Growth. **AU** Galor, Oded; Moay, Omer.

Moffitt, Robert

TI Tax Rates and Work Incentives in the Social Security Disability Insurance Program: Current Law and Alternative Reforms. **AU** Hoynes, Hilary Williamson; Moffitt, Robert.

Moon, Choon-Geol

TI Measuring the Efficiency of Capital Allocation in Commercial Banking. **AU** Hughes, Joseph P.; Lang, William; Moon, Choon-Geol; Pagano, Michael S.

Morgenstern, Richard D.

PD June 1997. **TI** Are We Overstating the Real Economic Costs of Environmental Protection? **AU** Morgenstern, Richard D.; Pizer, William A.; Shih, Jih-Shyang. **AA** Morgenstern: Resources for the Future and U.S. Environmental Protection Agency. Pizer and Shih: Resources for the Future. **SR** Resources for the Future Discussion Paper: 97/36R; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 40. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** C33, D24, L60, Q28. **KW** Environmental Costs. Fixed Effects. Translog Costs.

AB This paper explores the relationship between reported expenditures on environmental protection and the true economic costs. In contrast with previous research, the results here suggest that increases in reported costs may overstate the actual increase in economic cost. The results are based on a cost-function modeling approach, using a large plant-level data set for eleven four-digit SIC industries. First, real environmental expenditures are treated as a second output of the plant. Second, the joint production of conventional output and environmental effort is modeled as a cost-minimization problem. Third, the effect of an incremental dollar of reported

environmental expenditures is calculated at the plant, industry, and manufacturing sector levels. This approach pays particular attention to plant-specific effects. The preferred, fixed-effects model obtains an aggregate estimate of thirteen cents in increased costs for every dollar of reported incremental pollution control expenditures, with a standard error of sixty-one cents. This single estimate, however, conceals the wide range of values observed at the industry and plant level. Estimates using an alternative, random-effects model are uniformly higher and more consistent with previous work, but are likely to be biased by omitted variables characterizing differences among plants.

Morrin, Maureen

PD November 1997. **TI** Distinguishing Better from Poorer Decision Makers: A Study of Risk Propensity in the Face of Gains and Losses. **AU** Morrin, Maureen; Jacoby, Jacob; Venkataramani Johar, Gita; Kuss, Alfred; Mazursky, David. **AA** Morrin: Boston University. Jacoby: New York University. Venkataramani Johar: Columbia University. Kuss: Freie Universitat, Germany. Mazursky: Hebrew University. **SR** New York University, Salomon Center, Working Papers: S/97/28; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. **PG** 30. **PR** \$5.00 each; \$100.00 yearly subscription. **JE** D81, G11. **KW** Prospect Theory. Decision Making. Risk Propensity. Portfolio Risk.

AB This study unobtrusively measured individual risk propensity in an attempt to better understand the risk strategies used by better and poorer decision-makers. In line with expectations, better performers constructed riskier portfolios. In the face of losses, both the better and poorer performers conformed to Prospect Theory's prediction of risk-seeking behavior. However, in the face of gains, only the poorer performers conformed to PT's prediction of risk aversion. After learning that an investment had increased in value, the poorer performers tended to stand pat, whereas the better performers exhibited a significantly greater tendency to buy more of such a stock. Rather than, say, differences in the amount, content, or type of information search conducted, it is this asymmetric result in terms of decision-makers' conformance to Prospect Theory that accounted for superior decision-maker performance in the present research. Implications, limitations, and suggestions for future research are discussed.

Morris, Stephen

PD February 1998. **TI** An Instrumental Theory of Political Correctness. **AA** University of Pennsylvania and Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1209; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 35. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C72, C73, D82. **KW** Cheap Talk. Reputation.

AB An informed advisor wishes to convey her valuable information to an uninformed decision maker with identical preferences. Thus she has a current incentive to truthfully reveal her information. But if the decision maker thinks the

advisor might be biased in favor of one decision, and the advisor does not wish to be thought to be biased, the advisor has a reputational incentive to lie. I show that if the advisor is sufficiently concerned about her reputation, no information is conveyed in equilibrium. I also show that in a repeated version of this game, the advisor will care (instrumentally) about her reputation simply because she wants her valuable and unbiased advice to have an impact on future decisions.

Mozumdar, Abon

TI Predictable Changes in Yields and Forward Rates. AU Backus, David; Foresi, Silverio; Mozumdar, Abon; Wu, Liuren.

Mulvenon, James

PD July 1997. TI Chinese Military Commerce and U.S. National Security. AA RAND Corporation. SR RAND Corporation Report: MR/907.0/CAPP; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. PG 41. PR no charge. JE F23, F41, F42, H56. KW Defense Industries. Military-Industrial Complex. Foreign Corporations. Chinese Corporations. National Security.

AB This report attempts to evaluate the scale of Chinese military and defense-industrial commercial activity in the United States and the implications of this commerce upon the 1997 Most Favored Nation (MFN) debate as well as Sino-U.S. relations writ large. It should be of interest to government and corporate decision-makers in the U.S. and Asia, as well as academic researchers and other observers of the policy process.

Munro, Gordon R.

PD December 1998. TI The Economics of Overcapitalization and Fishery Resource Management: A Review. AA University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 98/21; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1, Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. PG 34. PR 30 cents per page U.S. and Canada, 40 cents per page International. JE Q22. KW Overcapitalization. Fisheries. Malleability. Spillover Effects. Capital Irreversibility.

AB This paper, which draws heavily upon the results of a recent meeting of the Food and Agricultural Organization (FAO) Technical Working Group on the Management of Fishing Capacity, reviews the underlying economics of the problem of overcapitalization in fisheries. The problem takes on real meaning, only if the relevant fleet/processing/human capital is non-malleable. One consequence of capital non-malleability is that what is today deemed by the resource manager to be the optimal, or target, stock of such capital will be influenced by yesterday's investment decisions, even if those decisions are now seen as having been highly undesirable. A second consequence is that we must now be acutely aware of the possible "spillover" effects arising from attempts to address the overcapitalization problem. Eliminating excess capacity in one fishery may simply aggravate management problems in other fisheries. Approaches to the control of overcapitalization are also discussed.

Musto, David K.

TI Understanding Fee Structures in the Asset Management Business. AU Lynch, Anthony W.; Musto, David K.

Muthoo, Abhinay

TI Corruption, Extortion and Evasion. AU Hindriks, Jean; Keen, Michael; Muthoo, Abhinay.

Myerson, Roger B.

PD July 1998. TI Comparison of Scoring Rules in Poisson Voting Games. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1214; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 41. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE D72. KW Voting. Scoring Rules. Pivot Probabilities.

AB Scoring rules are compared by the equilibria that they generate for simple elections with three candidates and voters drawn from large Poisson distributions. A calculus for comparing pivot probabilities in Poisson voting games is applied. For a symmetric Condorcet cycle, nonsymmetric discriminatory equilibria exist under best-rewarding scoring rules like plurality voting. A candidate who is universally disliked may still not be out of contention under worst-punishing scoring rules like negative-plurality voting. In elections where two of three candidates have the same position, symmetric equilibria coincide with majority rule only for scoring rules that are balanced between best-rewarding and worst-punishing. When voters also care about continuous functions of vote shares, equilibria may still depend on pivot probabilities.

PD July 1998. TI Political Economics and the Weimar Disaster. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1216; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 34. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE C70, N14, N44. KW John Maynard Keynes. Max Weber. Treaty of Versailles. Weimar Constitution. Game Theory.

AB The Allied leaders who produced the Treaty of Versailles and the German leaders who created the Weimar constitution relied significantly on the theoretical expertise of John Maynard Keynes and Max Weber respectively. It is argued here that integrated analytical approaches to the study of political and economic competition, which have been developed with game-theoretic methodology since the time of Keynes and Weber, can offer a valuable perspective to better understand the decisions that faced the leaders of Weimar and Versailles.

Naeve, Joerg

TI Contingent Commodities and Implementation. AU Chattopadhyay, Subir; Corchon, Luis C.; Naeve, Joerg.

Naik, Narayan Y.

TI Analytic Small Sample Bias and Standard Error Calculations for Tests of Serial Correlation in Market Returns. **AU** Smith, Michael S.; Naik, Narayan Y.

Nakamura, Leonard I.

PD March 1998. **TI** The Measurement of Retail Output and the Retail Revolution. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 98/05; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. **PG** 30. **PR** no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** D24, L81. **KW** Retail. Grocery. Food Retailing. Productivity.

AB The computerization of retailing has made price dispersion a norm in the United States, so that any given list price or transactions price is an increasingly imperfect measure of a product's resource cost. As a consequence, measuring the real output of retailers has become increasingly difficult. Food retailing is used as a case study to examine data problems in retail productivity measurement. Crude direct measures of grocery store output suggest that the CPI for food-at-home may have been overstated by 1.4 percentage points annually from 1978 to 1996.

TI Measuring Housing Services Inflation. **AU** Crone, Theodore M.; Nakamura, Leonard I.; Voith, Richard.

Neary, Hugh M.

PD May 1998. **TI** Dynamic Consistency in Incentive Planning with a Material Input. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 98/08; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1, Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 32. **PR** 30 cents per page U.S. and Canada, 40 cents per page International. **JE** D23, D82, P21. **KW** Incentives. Central Planning. Hoarding.

AB An incentive model of a planner and two firm-types is presented, in which the planner assigns the firms material input as part of the organization's production plan. The optimal incentive-compatible one-period plan is described. It is then shown that this static plan is not incentive-compatible in general in a dynamic (two-period) setting, if the firms can hoard the material input between periods. The incentive-compatible dynamic problem is presented and analyzed. This incentive problem is related to hoarding and dysfunction in the Soviet planning system.

Neu, Carl Richard

PD June 1998. **TI** Report on Inaugural Meeting. **AA** RAND Corporation. **SR** RAND Corporation Report: CF/140; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 7. **PR** no charge. **JE** F23, O19. **KW** Russia. Commerce. Congresses. Economic Conditions.

AB Contacts between senior Russian and American business leaders are becoming increasingly common. Most of these

contacts have been either largely ceremonial or narrowly focused on negotiating or implementing particular deals. Leaders of the two business communities have rarely met for in-depth discussions of their strategic interests, let alone met frequently enough to grasp fully or to influence significantly each other's ideas. To facilitate a more meaningful kind of interchange, RAND created the Russian-American Business Leaders Forum on Economic Growth and Prosperity. The members of the Forum are CEOs of major Russian and American firms currently engaged in international business or interested in entering into or expanding ventures with foreign partners. The members of the Forum manage firms in a variety of industries and vary in age, experience, and political orientation. They have in common, however, an interest in promoting mutually beneficial business relations between the United States and Russia.

PD June 1998. **TI** Otchet o Pervoi Vstreche. **AA** RAND Corporation. **SR** RAND Corporation Report: CF/140/01; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 7. **PR** no charge. **JE** not available. **KW** Russia. Commerce. Congresses. Economic Conditions.

AB This paper is written in Russian.

Neumark, David

PD July 1997. **TI** Age Discrimination Laws and Labor Market Efficiency. **AU** Neumark, David; Stock, Wendy A. **AA** Neumark: Michigan State University and National Bureau of Economic Research. Stock: Kansas State University. **SR** National Bureau of Economic Research Working Paper: 6088; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 44. **PR** \$5.00. **JE** K31, J14, J18, J26, J71. **KW** Elderly. Discrimination. Labor Markets. Retirement. Law.

AB In Lazear's (1979) model of efficient long-term incentive contracts, employers impose involuntary retirement based on age. This model implies that age discrimination laws, which bar involuntary termination's based on age, discourage the use of such contracts and reduce efficiency. Alternatively, by making it costly for firms to dismiss older workers paid in excess of their marginal product, such laws may serve as precommitment devices that make credible the long-term commitment to workers that firms make under Lazear contracts. Given that employers remain able to use financial incentives to induce retirement, age discrimination laws may instead strengthen the bonds between workers and firms and encourage efficient Lazear contracts. The authors assess evidence on these alternative interpretations of age discrimination laws by estimating the effects of such laws on the steepness of age-earnings profiles. The evidence indicates that age discrimination laws lead to steeper age-earnings profiles for cohorts entering the labor market.

PD August 1997. **TI** Do Minimum Wages Fight Poverty? **AU** Neumark, David; Wascher, William. **AA** Neumark: Michigan State University and National Bureau of Economic Research. Wascher: Board of Governors of the Federal Reserve System. **SR** National Bureau of Economic Research Working Paper: 6127; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** \$5.00. **JE** I30, J23, J38.

K31. KW Labor Studies. Minimum Wages. Poverty. Employment. Income Redistribution.

AB In this paper, the authors present evidence on the effects of minimum wages on family incomes from matched March CPS surveys, focusing in particular on the effectiveness of minimum wages in reducing poverty. The results indicate that over a one-to-two year period, minimum wages increase both the probability that poor families escape poverty and the probability that previously non-poor families fall into poverty. The estimated increase in the number of non-poor families that fall into poverty is larger than the estimated increase in the number of poor families that escape poverty, although this difference is not statistically significant. The authors also find that minimum wages tend to boost the incomes of poor families than remain below the poverty line. On net, the various tradeoffs created by minimum wage increases more closely resemble income redistribution among low-income families than income redistribution from high- to low-income families.

Newhouse, Joseph P.

TI Physician Fee Policy and Medicaid Program Costs. **AU** Gruber, Jonathan; Adams, Kathleen; Newhouse, Joseph P.

O'Brien, James M.

TI Deposit Insurance, Bank Incentives, and the Design of Regulatory Policy. **AU** Kupiec, Paul H.; O'Brien, James M.

O'Connell, Paul G. J.

PD July 1997. **TI** "The Bigger They Are, The Harder They Fall": How Price Differences Across U.S. Cities are Arbitrated. **AU** O'Connell, Paul G. J.; Wei, Shang-Jin. **AA** O'Connell: Harvard University. Wei: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6089; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** \$5.00. **JE** C32, F31, F41, R32, R40. **KW** Foreign Exchange. International Trade. Transport Costs. Purchasing Power Parity. One Price.

AB Recent empirical work has made headway in exploring the non-linear dynamics of deviations from the law of one price and purchasing power parity that can arise from transaction costs. However, there are two important facets of this work that need improvement. First, the choice of empirical specification is arbitrary. Second, the data used are typically composite price indices which are subject to potentially serious aggregation biases. This paper examines the evidence for transport-cost-induced nonlinear price behavior within the U.S. The authors address both of the above shortcomings. They use a simple continuous-time model to inform the choice of empirical specification. The model indicates that the behavior of deviations from price parity depends on the relative importance of fixed and variable transport costs. They employ data on desegregated commodity prices, yielding a "pure" measure of the deviations from price parity. The authors find strong evidence of nonlinear reversion in these deviations.

O'Rourke, Kevin H.

TI Were Trade and Factor Mobility Substitutes in History? **AU** Collins, William J.; O'Rourke, Kevin H.; Williamson, Jeffrey G.

Obstfeld, Maurice

PD June 1997. **TI** Nonlinear Aspects of Goods-Market Arbitrage and Adjustment: Heckscher's Commodity Points Revisited. **AU** Obstfeld, Maurice; Taylor, Alan M. **AA** Obstfeld: University of California and National Bureau of Economic Research. Taylor: Northwestern University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6053; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 32. **PR** \$5.00. **JE** E31, F31, F41. **KW** Arbitrage. Purchasing Power Parity. One Price. Commodity Points. Exchange Rates.

AB The authors propose that analysis of purchasing power parity (PPP) and the law of one price (LOOP) should explicitly take into account the possibility of "commodity points" -- thresholds delineating a region of no central tendency among relative prices, possibly due to lack of perfect arbitrage in the presence of transaction costs and uncertainty. The authors devise an econometric method to identify commodity points. Price adjustment is treated as a nonlinear process, and a threshold autoregression (TAR) offers a parsimonious specification within which both thresholds and adjustment speeds are estimated by maximum likelihood methods. Their model performs well using post-1980 data, and yields parameter estimates that appear quite reasonable: adjustment outside the thresholds might imply half-lives of price deviations measured in months rather than years, and the thresholds correspond to popular rough estimates as to the order of magnitude of actual transport costs.

TI Saving, Investment, and Gold: A Reassessment of Historical Current Account Data. **AU** Jones, Matthew T.; Obstfeld, Maurice.

Oliver, Jonathan J.

PD November 1997. **TI** Bayesian Approaches to Segmenting a Simple Time Series. **AU** Oliver, Jonathan J.; Forbes, Catherine S. **AA** Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Papers: 14/97; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. **PG** 20. **PR** no charge. **JE** C11, C22. **KW** Segmentation. Message Length. Bayes Factors. Time Series.

AB The segmentation problem arises in many applications in data mining, artificial intelligence and statistics. In this paper, we consider segmenting simple time series. We develop two Bayesian approaches for segmenting a time series, namely the Bayes Factor approach, and the Minimum Message Length (MML) approach. We perform simulations comparing these Bayesian approaches, and then perform a comparison with other classical approaches, namely AIC, MDL and BIC. We conclude that the MML criterion is the preferred criterion. We then apply the segmentation method to financial time series data.

Ord, J. Keith

TI Prediction Intervals for ARIMA Models. **AU** Snyder, Ralph D.; Ord, J. Keith; Koehler, Ann B.

Orphanides, Athanasios

PD December 1997. **TI** Monetary Policy Rules Based on

Real-Time Data. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1998/03; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 40. **PR** no charge. **JE** E52, E58. **KW** Monetary Policy. Federal Funds Rate. Taylor Rule. Real Time Data.

AB In recent years, simple policy rules have received attention as a means to a more transparent and effective monetary policy. Often, however, the analysis is based on unrealistic assumptions about the timeliness of data availability. This permits rule specifications that are not operational and ignore difficulties associated with data revisions. This paper examines the magnitude of these informational problems using Taylor's rule as an example. First, the author constructs a database of current quarter estimates/forecasts of the quantities required by the rule based only on information available in real time. Using this data he reconstructs the policy recommendations which would have been obtained in real time. The author demonstrates that the real-time policy recommendations differ considerably from those obtained with the ex post revised data. Within-year revisions in the policy recommendations are also quite large with a standard deviation exceeding that of the quarterly change of the federal funds rate.

Oshio, Takashi

PD September 1997. **TI** Social Security and Retirement in Japan. **AU** Oshio, Takashi; Yashiro, Naohiro. **AA** Oshio: Ritsumeikan University. Yashiro: Sophia University. **SR** National Bureau of Economic Research Working Paper: 6156; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 22. **PR** \$5.00. **JE** H55, J14, J21, J22, J26. **KW** Aging. Public Economics. Social Security. Labor Supply.

AB We provide the incentive mechanism of the public pension on the retirement decisions made in the Japanese labor market. Though the labor market participation of Japanese older persons is quite high by international standards, a principle incentive mechanism of the public pension system in Japan affecting retirement behavior has many things in common with those in other OECD countries. The pension benefits are designed "actuarially unfair," and the decision to work beyond age 60 is penalized. As the population ages quite rapidly, it is wasteful to maintain the disincentive mechanism arising from the actuarially unfair pension scheme for older persons.

Ostergaard, Charlotte

PD December 1997. **TI** Permanent Income, Consumption, and Aggregate Constraints: Evidence from US States. **AU** Ostergaard, Charlotte; Sorensen, Bent E.; Yosha, Oved. **AA** Ostergaard: Brown University and London School of Economics. Sorensen: Brown University. Yosha: Tel-Aviv University. **SR** Brown University, Department of Economics Working Paper: 98/01; Department of Economics, Box B, Brown University, Providence, RI 02912. **PG** 48. **PR** no charge. **JE** E21, E32. **KW** Regional Macroeconomics. General Equilibrium. Consumption. Credit Markets. Disposable Income.

AB The authors remove the aggregate United States (U.S.)-wide component in the U.S. state level disposable income and

consumption and find that state-specific consumption exhibits substantially less excess sensitivity to lagged state-specific disposable income than if the aggregate component is not controlled for. This is evidence that excess sensitivity of consumption in aggregate United States data is driven to a large extent by U.S.-wide effects. Ordering states by the persistence of income shocks, the authors find that removal of the aggregate component from the state level data reduces sensitivity for all states by the same amount and that the excess sensitivity of consumption is greater in states with more persistent income shocks. The authors also find that state-specific disposable income and consumption exhibit excess smoothness in the sense of Campbell and Deaton (1989). Finally, the authors study patterns of consumption smoothing via bank savings deposits and loans.

Oswald, Andrew J.

TI The Rising Well-Being of the Young. **AU** Blanchflower, David G.; Oswald, Andrew J.

Otoo, Maria Ward

PD September 1997. **TI** The Sources of Worker Anxiety: Evidence from the Michigan Survey. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/48; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 34. **PR** no charge. **JE** I31, J28, J64. **KW** Worker Anxiety. Job Security. Education.

AB This paper uses individual responses from the Michigan SRC survey of consumer attitudes to examine worker anxiety. It identifies "anxious" households (those that express some concern about their job security) and analyzes some factors that might be driving this angst. It found that a little more than a quarter of households revealed concerns about job security. Also, the results suggest that less educated households (those lacking a high school diploma) were significantly more likely to be concerned about job loss as were black and Asian households. Geographic factors were important in driving worker anxiety with largely households along the East Coast and West Coast significantly more likely to express concern over job security. The results also indicated that hearing news about layoffs or plant closings increased the likelihood that an employed household was anxious, and anxious households were more likely to hold unfavorable views on the overall economy.

Overland, Jody

TI Comparison Utility in a Growth Model. **AU** Carroll, Christopher D.; Overland, Jody; Weil, David N.

Owen, Ann L.

PD June 1997. **TI** Intergenerational Earnings Mobility, Inequality, and Growth. **AU** Owen, Ann L.; Weil, David N. **AA** Owen: Federal Reserve Board. Weil: Brown University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6070; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 55. **PR** \$5.00. **JE** D31, D63, J31, J62, O40. **KW** Economic Fluctuations. Growth. Mobility. Inequality. Education.

AB The authors examine a model in which per capita income, inequality, intergenerational mobility, and returns to education are all determined endogenously. Individuals earn wages depending on their ability, which is a random variable. They purchase an education with transfers received from their parents, and are subject to liquidity constraints. In the model, multiple steady state equilibria are possible: countries with identical tastes and technologies can reach differing rates of mobility, inequality, and per capita income. Equilibria with higher levels of output also have lower inequality, higher mobility, and more efficient distribution of education.

Ozdenoren, Emre

TI Maxmin Expected Utility over Savage Acts with a Set of Priors. **AU** Casadesus-Masanell, Ramon; Klibanoff, Peter; Ozdenoren, Emre.

Pace, Scott

TI Space: Emerging Options for National Power. **AU** Johnson, Dana J.; Pace, Scott; Gabbard, C. Bryan.

Pagano, Michael

TI Measuring the Efficiency of Capital Allocation in Commercial Banking. **AU** Hughes, Joseph P.; Lang, William; Moon, Choon-Geol; Pagano, Michael S.

Page, Talbot

TI An Experimental Study of the Effect of Private Information in the Coase Theorem. **AU** McKelvey, Richard D.; Page, Talbot.

Paladino, Giovanna

TI Exchange Rate Misalignments and Crises. **AU** Stein, Jerome L.; Paladino, Giovanna.

Palme, Marten

PD August 1997. **TI** Social Security, Occupational Pensions, and Retirement in Sweden. **AU** Palme, Marten; Svensson, Ingemar. **AA** Palme: Stockholm School of Economics. Svensson: National Social Insurance Board. **SR** National Bureau of Economic Research Working Paper: 6137; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 50. **PR** \$5.00. **JE** H55, J14, J21, J22, J26. **KW** Aging. Public Economics. Social Security. Retirement. Labor Supply.

AB This paper provides an overview of the Swedish social security system and its impact on individual retirement behavior. First, we give some historical facts, as well as a more detailed description of the current situation, of labor market behavior of older persons. Second, we describe the social security system. We also describe the different occupational pension schemes, which have an increasing importance. Finally, we show the results from a simulation. We have used the earnings path of several representative workers to calculate the implicit tax (or subsidy) rate on additional work after age 55 generated by the social security system in interaction with occupational pensions and income taxes as well as housing allowances. We find that the observed labor market behavior of older men is in accordance with the economic incentives generated by the social security system and in particular with the occupational pension scheme for blue-collar workers.

Palmer, Karen

TI Upstream Pollution, Downstream Waste Disposal, and the Design of Comprehensive Environmental Policies. **AU** Walls, Margaret; Palmer, Karen.

Papell, David H.

TI International Trade and Structural Change. **AU** Ben-David, Dan; Papell, David H.

Park, George S.

PD August 1998. **TI** The Class of 2014: Preserving Access to California Higher Education. **AU** Park, George S.; Lempert, Robert J. **AA** RAND Corporation. **SR** RAND Corporation Report: MR/971/EDU; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 64. **PR** no charge. **JE** H52, H72, I21, I22, J24. **KW** College Attendance. State Aid. Higher Education. Educational Productivity. Public Education.

AB Discusses a study that used a new approach to address the conditions under which California can preserve access to public higher education over the next two decades. The new approach, exploratory modeling, combines traditional quantitative forecasting with scenario planning to produce, via computer simulation and data similar to that used in other studies, plausible scenarios of the future that clarify key uncertainties facing decision-makers and provide a framework for stakeholder debate and policy-choice comparison. Presents the scenarios in color-illustrated form, called landscapes of plausible futures, to examine how the interrelationship of three key factors -- demand for higher education, competition for state revenues, and potential productivity improvements -- may affect California higher education. Shows that trends in state funding and productivity improvements dominate the question of future access. Points out that these landscapes could be used in a further study to compare the performance of potential policy choices.

Parry, Ian W. H.

PD July 1997. **TI** Productivity Trends in the Natural Resource Industries. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 97/39; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 39. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** L70, O30, Q23, Q32. **KW** Productivity. Natural Resources. Technological Innovation. Depletion Effect.

AB This paper examines multi-factor productivity trends in the U.S. petroleum, coal, copper and logging industries since 1970. Measures of multi-factor productivity growth are negative for all four industries during the 1970's. This led to fears that stocks of natural resources were being exhausted, which might hinder future economic growth. However in retrospect the 1970's appear exceptional, rather than marking a change in long run productivity trends. The decline in measured multi-factor productivity in that decade appears to be explained by special factors that generally have a transitory rather than a permanent effect on productivity growth. For example, the rise in natural resource prices encouraged the entry of relatively inefficient producers. New environmental and health and safety regulations were phased in that also reduced measured multi-factor productivity. Over the last 15 years however,

productivity measures have improved significantly in all the industries. Productivity in 1992 was around 75 percent higher in the petroleum industry than at the trough of the productivity slowdown, and around 60 percent higher in coal and copper. To some extent these improvements represent restructuring and consolidation in response to falling output prices. However, technological developments have also played an important role.

PD October 1997. **TI** Pollution Regulation and the Efficiency Gains from Technological Innovation. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/04; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 28. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** O38, Q25, Q28. **KW** Emissions Tax. Tradable Permits. Research and Development. Efficiency Effects. Patents.

AB Previous studies suggest that emissions taxes are more efficient at stimulating the development of improved pollution abatement technologies than other policy instruments, such as (non-auctioned) tradable emissions permits. We present results from a competitive model that cast some doubt on the empirical importance of this assertion. For example, we find that efficiency in the market for "environmental R&D" under tradable permits is typically less than 6 percent lower than that under an emissions tax for innovations that reduce pollution abatement costs by 10 percent or less. However the discrepancy is more significant in the case of more major innovations. We also find that the presence of R&D spillovers per se does not necessarily imply large inefficiency in the R&D market. For example, efficiency in the R&D market under a Pigouvian emissions tax is generally more than 90 percent of that in the first best outcome if the private benefit from innovation exceeds 50 percent of the social benefit. Thus the R&D spillover effect must substantially limit the private benefit from R&D in our analysis for there be a potentially "large" efficiency gain from additional policies -- such as research subsidies -- to stimulate innovation.

Passmore, S. Wayne

TI The Subsidy Provided by the Federal Safety Net: Theory, Measurement and Containment. **AU** Kwast, Myron L.; Passmore, S. Wayne.

Pazgal, Amit

TI The Equivalence of Price and Quantity Competition with Incentive Scheme Commitment. **AU** Miller, Nolan H.; Pazgal, Amit.

Peracchi, Franco

TI Social Security and Retirement in Spain. **AU** Boldrin, Michele; Jimenez-Martin, Sergi; Peracchi, Franco.

Pestieau, Pierre

PD September 1997. **TI** Social Security and Retirement in Belgium. **AU** Pestieau, Pierre; Stijns, Jean-Philippe. **AA** Universite de Liege. **SR** National Bureau of Economic Research Working Paper: 6169; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 17. **PR** \$5.00. **JE** H55, J14, J21, J22, J26. **KW** Aging. Public Economics. Social Security. Retirement. Labor Supply.

AB Belgium like many other industrialized countries is

facing serious problems in financing its social security. Whereas the effects of aging are still to come, Belgium currently experiences one of the lowest attachments to the labor force of older persons. This paper presents the key features of the Belgian social security system and focuses on labor force participation and benefit receipt. Most of the attention is given to the interaction between retirement behavior and the various social security schemes. By measuring the implicit tax/subsidy rate on work after 55 through these schemes, we can also explain the actual pattern of early and normal retirement of Belgian older workers.

Petrucci, Alberto

PD May 1997. **TI** Money, Labour Supply and Growth in a Liquidity Costs Economy. **AA** University of Molise. **SR** University of Exeter Department of Economics Discussion Paper: 97/07; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. Website: www.ex.ac.uk/~BPEARSON/Research/DiscussionPapers/Econ/DiscussionPapers.html. **PG** 13. **PR** no charge. **JE** E31, E51, O42. **KW** Money. Growth. Liquidity Costs. Inflation. Consumption.

AB This paper examines the steady-state implications of anticipated inflation within an exogenous monetary growth model with liquidity costs and an endogenous labor supply. Whether or not money is superneutral depends upon the utility function chosen. Monetary growth leaves capital and labor unaffected, when a constant relative risk aversion class of utility functions (with consumption and leisure Edgeworth dependent) is employed. If instead consumption and leisure are Edgeworth independent and at the same time preferences are isoelastic in consumption, what matters for detecting the final effects of long run inflation on capital and labor is the consumption intertemporal elasticity of substitution.

Pfann, Gerard A.

TI Business Success and Businesses' Beauty Capital. **AU** Bosman, Ciska M.; Pfann, Gerard A.; Biddle, Jeff E.; Hamermesh, Daniel S.

Philippopoulos, Apostolis

TI Inflation and Exchange-Rate Regimes in Mexico. **AU** Li, Carmen A.; Philippopoulos, Apostolis; Tzavalis, Elias.

Phillips, Richard D.

TI Regulatory Solvency Prediction in Property-Liability Insurance: Risk-Based Capital, Audit Ratios, and Cash Flow Simulation. **AU** Cummins, J. David; Grace, Martin F.; Phillips, Richard D.

Piccione, Michele

TI On the Equivalence of Simultaneous and Sequential Binary Elections. **AU** Dekel, Eddie; Piccione, Michele.

Piehl, Anne Morrison

TI Recent Immigrants: Unexpected Implications for Crime and Incarceration. **AU** Butcher, Kristin F.; Piehl, Anne Morrison.

Pischke, Jorn-Steffen

TI Observations and Conjectures on the U.S. Employment Miracle. **AU** Krueger, Alan B.; Pischke, Jorn-Steffen.

Pitt, Mark M.

PD January 1998. **TI** Credit Programs for the Poor and the Nutritional Status of Children in Rural Bangladesh. **AU** Pitt, Mark M.; Khandker, Shahidur R.; Chowdhury, Omar Haider; Millimet, Daniel L. **AA** Pitt and Millimet: Brown University. Khandker: World Bank. Chowdhury: Bangladesh Institute. **SR** Brown University, Department of Economics Working Paper: 98/04; Department of Economics, Box B, Brown University, Providence, RI 02912. **PG** 43. **PR** no charge. **JE** C30, I12, I18, J13, O18. **KW** Rural Credit. Child Health. Nutrition. Gender. Bangladesh.

AB The impact of micro-credit programs, including the Grameen Bank, on the nutritional status of children by gender in rural Bangladesh is evaluated. Lacking exclusion restrictions of the usual sort, the effect of credit program participation by gender of participant is identified by imposing a factor structure on the regression errors. Women's credit is found to have a large and statistically significant impact on two of three measures of the nutritional well being of both boy and girl children. Credit provided men has no statistically significant impact and the null hypothesis of equal credit effects by gender of participant is rejected.

Pizer, William A.

TI Are We Overstating the Real Economic Costs of Environmental Protection? **AU** Morgenstern, Richard D.; Pizer, William A.; Shih, Jih-Shyang.

PD October 1997. **TI** Prices vs. Quantities Revisited: The Case of Climate Change. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/02; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 48. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** C68, D81, Q28. **KW** Climate Change. Uncertainty. Price Controls. Quantity Controls. General Equilibrium.

AB Uncertainty about compliance costs causes otherwise equivalent price and quantity controls to lead to different welfare outcomes. Price controls -- taxes -- fix the marginal cost of compliance and lead to uncertain levels of compliance. Quantity controls -- tradable permits or quotas -- fix the level of compliance but result in uncertain marginal costs. Weitzman (1974) derived theoretical conditions under which one policy is preferred. Here, this principal is applied to worldwide greenhouse gas (GHG) control, using a global integrated climate economy model to simulate the consequences of uncertainty and compare the efficiency of taxes and permits empirically. The results indicate that an optimal tax policy generates gains five times higher than the optimal permit policy. A hybrid policy sets a target emission level using an initial distribution of tradable permits, allowing additional permits to be purchased at a "trigger" price. The optimal hybrid policy leads to welfare benefits slightly higher than the optimal tax policy, while preserving the ability to flexibly distribute the rents associated with the right to emit. Also, a sub-optimal hybrid policy, based on a stringent target and high trigger price, generates much better welfare outcomes than a straight permit system with the same target.

Polak, Ben

TI Banks Versus Bonds: The Emergence and Persistence of Two Financial Systems. **AU** Baliga, Sandeep; Polak, Ben.

Porojan, Anca-Manuela

PD November 1997. **TI** Who Gains (Relatively) from Monetary Union? An Estimate of Relative Net Benefits for EU 15 Member States. **AA** University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 97/13; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. Website:

www.ex.ac.uk/BPearson/Research/DiscussionPapers/Econ/DiscussionPapers.html. **PG** 27. **PR** no charge. **JE** E19, E50, F15, F33, O52. **KW** Monetary Union. Single Currency. Factor Analysis. Discriminant Analysis.

AB The paper addresses the issue of the distribution by country of the costs and benefits associated with the introduction of a single currency in Europe, by estimating the relative costs and benefits for the fifteen member states through the use of exploratory multivariate statistical techniques. The author's results indicate an uneven distribution of the potential relative costs and benefits across the EU member states. Moreover, the author finds that not all the characteristics identified as relevant by the optimum currency area literature are equally important in shaping the net outcome of the move to the single currency.

Portney, Paul R.

TI Mock Referenda for Intergenerational Decisionmaking. **AU** Kopp, Raymond J.; Portney, Paul R.

Posen, Adam S.

TI Inflation Targeting: Lessons from Four Countries. **AU** Mishkin, Frederic S.; Posen, Adam S.

Postel-Vinay, Fabien

PD December 1998. **TI** The Dynamics of Technological Unemployment. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 98/20; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1, Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 29. **PR** 30 cents per page U.S. and Canada, 40 cents per page International. **JE** E24, J41, J64, O33. **KW** Unemployment. Technological Change. Echo Effects. Productivity Slowdown.

AB This paper investigates and provides a comparison of the short- and long-run effects of technological progress on employment. It presents a simple standard model of matching unemployment that captures the negative creative destruction effects of technological change on employment. In the long-run, faster technological change implies faster job obsolescence, which is detrimental to the equilibrium level of employment. But it is also shown to have short-run positive and potentially important effects on employment. The dynamic behavior of employment is thus "perverse" in some sense, since its long- and short- run adjustments have opposite signs. This is an important feature of the model, since it tends to partially reconcile the "Schumpeterian" view of the effects of technological change on labor market variables with the observed facts, and in particular with the response of most OECD unemployment rates to the mid 1970's productivity

slowdown.

Poterba, James M.

TI Why do Economists Disagree About Policy? The Roles of Beliefs about Parameters and Values. AU Fuchs, Victor R.; Krueger, Alan B.; Poterba, James M.

Powell, Mark R.

PD March 1997. **TI** Three-City Air Study. AA Resources for the Future. SR Resources for the Future Discussion Paper: 97/29; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. PG 21. PR Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** L51, Q25, Q28, R50. **KW** Regulatory. Non-Regulatory. Air Quality. Pollution.

AB This study analyzes the local regulatory and non-regulatory determinants of ambient air quality in Allegheny, Baltimore, and Cuyahoga Counties over the period 1972-1992. Mandated pollution control investments appear to have often had a statistically significant effect in reducing maximum concentrations of suspended particulates and tropospheric ozone in these areas. The effects of regulatory air quality controls, however, generally have been overshadowed by the impacts of non-regulatory factors. In general, local regulatory and non-regulatory factors failed to account for a majority of the variation in local air quality. This underscores the importance of regional or national factors in determining local air quality.

PD August 1997. **TI** Risk Assessment for National Natural Resource Conservation Programs. AU Powell, Mark R.; Wilson, James D. AA Resources for the Future. SR Resources for the Future Discussion Paper: 97/49; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. PG 27. PR Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** Q18, Q28. **KW** Risk Assessment. Conservation. Natural Resources. Agriculture.

AB This paper reviews U.S. Department of Agriculture risk assessments prepared for two natural resource conservation programs authorized as part of the 1996 Farm Bill -- the Conservation Reserve Program (CRP) and the Environmental Quality Incentives Program (EQIP). The risk assessments were required under the Federal Crop Insurance Reform and Department of Agriculture Reorganization Act of 1994. The assessment framework was appropriate, but assessment endpoint selection, definition, and estimation could be improved. Many of the assessment endpoints were too ill-defined to provide an adequate characterization of program benefits. Two reasons for this lack of clarity were apparent: 1) the large, unprioritized set of natural resource conservation objectives for both programs and 2) lack of agreement about which changes in environmental attributes should be considered adverse and which are negligible. There is also some "double counting" of program benefits. Although the CRP and EQIP are, in part, intended to assist agricultural producers with regulatory compliance, the resultant environmental benefits would occur absent the programs. The central recommendation of the paper is that future risk assessments go beyond identifying the natural resources at greatest risk from agricultural activities and instead provide scientific input for analyses of the cost-effectiveness of the conservation programs.

PD September 1997. **TI** Assessing the Constraints and Opportunities for Private-Sector Participation in Activities Implemented Jointly: Two Case Studies from the US Initiative for Joint Implementation. AU Powell, Mark R.; Lile, Ronald D.; Toman, Michael. AA Resources for the Future. SR Resources for the Future Discussion Paper: 97/38; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. PG 21. PR Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** F21, Q28. **KW** Climate Change. Joint Implementation. Greenhouse Gas.

AB This paper assesses opportunities for private-sector participation in Activities Implemented Jointly under the United Nations Framework Convention on Climate Change. The United States Initiative on Joint Implementation (USII) is discussed -- objectives, proposal review and evaluation criteria, and a classification of project proposals. Two USII case studies are examined. One case is an energy end use project that has gained formal acceptance and financing. The other is an energy production project proposal that has not secured acceptance or financing. In both cases, transaction costs were substantial, and gaining formal host country acceptance was regarded as the principal impediment to project development. The cases illustrate how the host country project approval process can become entangled in broader struggles over economic reforms. Also, project proponents may have divergent perspectives on the speculative value of greenhouse gas (GHG) credits. An enforceable cap on GHG emissions in the project funders' countries is contrary to the position of energy and power suppliers who promote voluntary emissions reductions. For emissions reduction technology firms, however, establishing a value for GHG credits would help generate demand for the firms' stock in trade. The study underscores that financing remains the ultimate hurdle to project implementation.

PD September 1997. **TI** Science in Sanitary and Phytosanitary Dispute Resolution. AA Resources for the Future. SR Resources for the Future Discussion Paper: 97/50; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. PG 31. PR Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** I18, Q17, Q18. **KW** Agriculture. World Trade Organization. Sanitary Risk. Phytosanitary Risk.

AB The World Trade Organization Sanitary and Phytosanitary Agreement (SPS Agreement) relies heavily on expert organizations to handle trade disputes concerning food safety or plant and animal health protection. However, the agreement leaves many science policy issues unsettled. In one case, the international scientific consensus strongly supports the U.S. challenge of the European Union's ban on cattle growth hormones. However, the root causes of the dispute go much deeper. In another case, domestic avocado producers challenged a U.S. Department of Agriculture assessment which concluded that a partial lifting of the ban on Mexican avocado imports posed a negligible plant pest risk. Although independent scientists endorsed the Department's phytosanitary risk assessment, a contributing factor to dispute resolution was the threat of retaliation against U.S. agricultural exports. A recent survey of current and proposed technical barriers to agricultural exports suggests that trade impacts could approach \$5 billion a year and that most future SPS disputes will be over biological hazards -- particularly plant pests and food-borne microbial pathogens. This poses a tremendous challenge.

however, because the practice of risk assessment for biological stressors is much less developed than that for chemical substances.

Prakash, Gauri

PD June 1997. **TI** Measuring Market Integration: A Model of Arbitrage with an Econometric Application to the Gold Standard, 1879-1913. **AU** Prakash, Gauri; Taylor, Alan M. **AA** Prakash: Northwestern University. Taylor: Northwestern University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6073; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 35. **PR** \$5.00. **JE** E42, F31, F33, N11. **KW** Economic History. Gold Standard. International Arbitrage. Market Integration. Monetary Standards.

AB A major question in the literature on the classical gold standard concerns the efficiency of international arbitrage. This paper offers a new methodology for measuring market integration, based on a theoretical model of arbitrage applicable to any type of market. The model is econometrically tractable using the techniques of threshold autoregressions. The authors study the efficiency of the dollar-sterling gold standard in this framework, and they radically improve the empirical basis for investigation by compiling a new, high-frequency series of continuous daily data from 1879 to 1913. Using data at this frequency the authors can derive reasonable econometric estimates of the size of transaction-cost bands (as compared with direct cost estimates). They can also estimate the speed of adjustment through which disequilibria (gold-point violations) were corrected. The changes in these measures over time provides an insight into the evolution of market integration in the classical gold standard.

Probst, Katherine N.

TI Land Use and Remedy Selection: Experience from the Field -- The Industri-Plex Site. **AU** Wernstedt, Kris; Probst, Katherine N.

TI Basing Superfund Cleanups on Future Land Uses: Promising Remedy or Dubious Nostrum? **AU** Wernstedt, Kris; Hersch, Robert; Probst, Katherine N.

Prusa, Thomas J.

TI Tariff Policy for a Monopolist Under Incomplete Information. **AU** Kolev, Dobrin R.; Prusa, Thomas J.

Raphael, Steven

PD January 1998. **TI** Geographic Mobility, Race, and Wage Differentials. **AU** Raphael, Steven; Riker, David A. **AA** University of California, San Diego. **SR** University of California, San Diego Department of Economics Working Paper: 97/05R; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 32. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** J31, J61, J71, R23. **KW** Geographic Mobility. Equilibrium Search. Discrimination. Wages. Earnings Distribution.

AB This paper analyzes the relationship between geographic mobility and earnings. We present an equilibrium search model that yields differences between the reservation wages of mobile

and immobile workers. The expected wages of mobile workers exceed those of immobile workers due to partial sorting across high- and low-paying firms. An extension to visibly distinct groups with different proportions immobile yields statistical discrimination against immobile group members. Using combined Displaced Workers Files, we find that mobility positively affects earnings and partially explains racial and ethnic earnings differentials. To test for statistical discrimination, we estimate separate earnings functions for union and non-union workers.

PD February 1998. **TI** Are Suburban Firms More Likely to Discriminate Against African-Americans? **AU** Raphael, Steven; Stoll, Michael A.; Holzer, Harry J. **AA** Raphael: University of California, San Diego. Stoll: University of California, Los Angeles. Holzer: Michigan State University. **SR** University of California, San Diego, Department of Economics Working Paper: 98/05; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 30. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** J15, J71, R30. **KW** Spatial Mismatch. Discrimination. Hiring.

AB This paper presents a test of the hypothesis that employers in suburban locations are more likely to discriminate against African-Americans than employers located in central cities. Using a difference-in-difference framework, we compare central city-suburban differences in racial hiring outcomes for firms where a white person is in charge of hiring (white employers, for short) to similar geographic differences in outcomes for firms where a black person is in charge of hiring (black employer). We find that both suburban black and white employers hire fewer blacks than their central-city counterparts. Moreover, the suburban/central city hiring gap among black employers is as large as, or larger than, that of white employers. Suburban black employers, however, receive many more applications from blacks and hire more blacks than do white firms in either location.

TI Have Employment Relationships in the United States Become Less Stable? **AU** Bansak, Cynthia; Raphael, Steven.

Rauch, James E.

TI Openness, Specialization, and Productivity Growth in Less Developed Countries. **AU** Weinhold, Diana; Rauch, James E.

Ray, Debraj

PD January 1998. **TI** A Theory of Endogenous Coalition Structures. **AU** Ray, Debraj; Vohra, Rajiv. **AA** Ray: Boston University and Instituto de Analisis Economico. Vohra: Brown University. **SR** Brown University, Department of Economics Working Paper: 98/02; Department of Economics, Box B, Brown University, Providence, RI 02912. **PG** 54. **PR** no charge. **JE** C71, C72, C78, D62. **KW** Coalitions. Bargaining. Game Theory. Externalities. Oligopoly.

AB Consider an environment with widespread externalities, and suppose that binding agreements can be written. We study coalition formation in such a setting. Our analysis proceeds by defining on a partition function an extensive form bargaining game. We establish the existence of a stationary sub-game perfect equilibrium for such a game. Our main results are concerned with the characterization of equilibrium coalition

structures. We develop an algorithm that generates (under certain conditions) an equilibrium coalition structure. Our characterization results are especially sharp for symmetric partition functions. In particular, we provide a uniqueness theorem and apply our results to a Cournot oligopoly.

Razin, Ofair

PD September 1997. **TI** Real Exchange Rate Misalignments and Growth. **AU** Razin, Ofair; Collins, Susan M. **AA** Collins: Georgetown University and National Bureau of Economic Research. Razin: National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6174; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 19. **PR** \$5.00. **JE** F31, F43. **KW** Exchange Rates. Growth. International Finance. Misalignment. Open Economy.

AB Real exchange rate (RER) misalignment is now a standard concept in international macroeconomic theory and policy. However, there is neither a consensus indicator of misalignment, nor an agreed upon methodology for constructing such an indicator. This paper constructs an indicator of RER misalignment for a large sample of developed and developing countries. This indicator is based on a well-structured, but simple extension of an IS-LM model of an open economy. The paper then uses regression analysis to explore whether RER misalignments are related to country growth experiences. Interestingly, the work finds that there are important non-linearity's in the relationship. Only very high over- valuations appear to be associated with slower economic growth, while moderate to high (but not very high) under- valuations appear to be associated with more rapid economic growth.

Rebelo, Sergio

TI Beyond Balance Growth. **AU** Kongsamut, Piyabha; Rebelo, Sergio; Xie, Danyang.

PD September 1997. **TI** What Happens when Countries Peg their Exchange Rates? (The Real Side of Monetary Reforms). **AA** Northwestern University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6168; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** \$5.00. **JE** E62, F41. **KW** Exchange Rates. Fiscal Policy. Economic Fluctuations. International Finance.

AB There is a well-known set of empirical regularities that describe the experience of countries that peg their exchange rate as part of a macroeconomic adjustment program. Following the peg economies tend to experience an increase in GDP, a large expansion of production in the non-tradable sector, a contraction in tradables production, a current account deterioration, an increase in the real wage, a reduction in unemployment, a sharp appreciation in the relative price of non- tradables and a boom in the real estate market. This paper discusses how the changes in the expected behavior of fiscal policy that tend to be associated with the peg can contribute to explaining these facts.

Reeve, Trevor A.

TI Human Capital, Unemployment, and Relative Wages in a Global Economy. **AU** Davis, Donald R.; Reeve, Trevor A.

Reiter, Stanley

PD August 1998. **TI** Interdependent Preferences and Groups of Agents. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1217; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 35. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D11, D71, D81. **KW** Groups. Interdependent Preferences. Rational Choice. Social Choice.

AB A considerable part of economic activity is carried on in groups. In some cases economic theory treats groups as economic agents. This raises the question of how a household or other group should be characterized as an agent. The degree and nature of participation in the group as distinct from membership typically involves choice. Within the rational choice approach the group is to be understood in terms of the individuals who make it up. To the extent that a group acts as a single entity or agent, it presents a social choice problem. This note formalizes a notion of interdependent preferences, and attempts a limited exploration of how the rational choice framework can operate with the expanded concept of preference. In this formulation an agent's knowledge of the preference relation of another may be restricted, but it is knowledge, i.e., there is no uncertainty about what is known.

Revesz, Richard L.

TI The Positive Political Economy of Instrument Choice in Environmental Policy. **AU** Keohane, Nathaniel O.; Revesz, Richard L.; Stavins, Robert N.

Reville, Robert

TI Background and Study Design Report for Policy Evaluation of the Effect of the 1996 Welfare Reform Legislation on SSI Benefits for Disabled Children. **AU** Rogowski, Jeannette; Karoly, Lynn; Klerman, Jacob; Reville, Robert; Inkelas, Moira; Hoube, Jill; Rowe, Melissa; Sastry, Narayan; Hawes- Dawson, Jennifer.

TI Background and Study Design Report for Policy Evaluation of the Effect of the 1996 Welfare Reform Legislation on SSI Benefits for Disabled Children. **AU** Rogowski, Jeannette; Karoly, Lynn; Klerman, Jacob; Reville, Robert; Inkelas, Moira; Hoube, Jill; Rowe, Melissa; Sastry, Narayan; Hawes- Dawson, Jennifer.

Richardson, Matthew

TI Optimal Risk Management Using Options. **AU** Ahn, Dong-Hyun; Boudoukh, Jacob; Richardson, Matthew; Whitelaw, Robert F.

TI Optimal Risk Management Using Options. **AU** Ahn, Dong-Hyun; Boudoukh, Jacob; Richardson, Matthew; Whitelaw, Robert F.

TI Optimal Risk Management Using Options. **AU** Ahn, Dong-Hyun; Boudoukh, Jacob; Richardson, Matthew; Whitelaw, Robert F.

TI Optimal Risk Management Using Options. **AU** Ahn, Dong-Hyun; Boudoukh, Jacob; Richardson, Matthew; Whitelaw, Robert F.

TI The Best of Both Worlds: A Hybrid Approach to Calculating Value at Risk. **AU** Boudoukh, Jacob; Richardson, Matthew; Whitelaw, Robert F.

Riker, David A.

TI Geographic Mobility, Race, and Wage Differentials. **AU** Raphael, Steven; Riker, David A.

Roberts, John M.

PD November 1997. **TI** The Wage Curve and the Phillips Curve. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/57; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 13. **PR** no charge. **JE** E24, E31, J31, J64. **KW** Unemployment. Wages. Phillips Curve.

AB Blanchflower and Oswald (1994) have argued that, in regional data, the level of unemployment is related to the level of wages. This result is at variance with an application of the original Phillips curve to regional data, which would predict that the change in wages ought to be related to the unemployment rate. On the other hand, there is considerable empirical support for the expectations-augmented Phillips curve using macroeconomic data. I resolve this tension by showing that a standard macroeconomic expectations-augmented Phillips curve can be derived from microfoundations that begin with the wage curve.

Roberts, Mark J.

PD June 1997. **TI** Output Price and Markup Dispersion in Micro Data: The Roles of Producer Heterogeneity and Noise. **AU** Roberts, Mark J.; Supina, Dylan. **AA** Roberts: Pennsylvania State University and National Bureau of Economic Research. Supina: University of Vienna. **SR** National Bureau of Economic Research Working Paper: 6075; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** \$5.00. **JE** D40, L11, L60. **KW** Industrial Organization. Manufacturing. Producer Heterogeneity. Output Markets. Pricing.

AB This paper provides empirical evidence on the extent of producer heterogeneity in the output market by analyzing output price and price-marginal cost markups at the plant level for thirteen homogeneous manufactured goods. It relies on micro data from the U.S. Census of Manufactures over the 1963-1987 period. The amount of price heterogeneity varies substantially across products. Over time, plant transition patterns indicate more persistence in the pricing of individual plants than would be generated by purely random movements. High-price and low-price plants remain in the same part of the price distribution with high frequency, suggesting that underlying time-invariant structural factors contribute to the price dispersion. Large producers have lower output prices. Marginal cost and the markups are estimated for each plant. The markup remains unchanged or increases with plant size for all but four of the products and declining marginal costs play an important role in generating this pattern.

Rodrik, Dani

PD August 1997. **TI** What Drives Public Employment? **AA** Harvard University and National Bureau of Economic

Research. **SR** National Bureau of Economic Research Working Paper: 6141; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 18. **PR** \$5.00. **JE** F41, H50, J45, O11. **KW** International Trade. Development. Public Employment. Labor Markets.

AB Excessive levels of government employment is one of the most frequent complaints made about public-sector governance in developing economies. The explanation typically offered is that governments have used public-sector employment as a tool for generating and redistributing rents. This paper suggests an alternative hypothesis for government employment practices: relatively safe government jobs represent partial insurance against undiversifiable external risk faced by the domestic economy. By providing a larger number of "secure" jobs in the public sector, a government can counteract the income and consumption risk faced by households. The author shows that countries that are greatly exposed to external risk have higher levels of government employment and have experienced faster rates of growth of government consumption. The basic finding on the correlation between government employment and exposure to external risk is robust against the alternative hypothesis that government employment has been driven by considerations of rent seeking and rent distribution.

Rogers, John H.

TI Intra-National, Intra-Continental, and Intra-Planetary PPP. **AU** Engel, Charles; Hendrickson, Michael K.; Rogers, John H.

Rogowski, Jeannette

PD April 1998. **TI** Background and Study Design Report for Policy Evaluation of the Effect of the 1996 Welfare Reform Legislation on SSI Benefits for Disabled Children. **AU** Rogowski, Jeannette; Karoly, Lynn; Klerman, Jacob; Reville, Robert; Inkelas, Moira; Hoube, Jill; Rowe, Melissa; Sastry, Narayan; Hawes-Dawson, Jennifer. **AA** RAND Corporation. **SR** RAND Corporation Report: DRU/1808/SSA; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 147. **PR** no charge. **JE** H53, H55, I18, I38. **KW** Supplemental Security Income. Handicapped Children. Social Security. Child Welfare. Disability Evaluation.

AB The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA, or PL 104-193), which was passed in August 1996, changed the determination of childhood disability by providing a new statutory definition of disability determination for children applying for Supplemental Security Income (SSI). In addition, the law required that all children attaining the age of 18 be redetermined for eligibility under adult criteria. The purpose of this project is to evaluate the effects of this legislative change. In particular, it will provide information on the progress of the redetermination process and will evaluate its effects on SSI program costs and caseloads and on the lives of affected children and their families.

Romer, David

PD July 1997. **TI** Misconceptions and Political Outcomes. **AA** University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6117; National Bureau of Economic Research, 1050 Massachusetts Avenue,

Cambridge, MA 02138. Website: www.nber.org. PG 30. PR \$5.00. JE D72, D82. KW Political Processes. Decision Making. Conflict. Information.

AB A large recent literature shows that strategic interactions among actors with conflicting objectives can produce inefficient political decisions. This paper investigates an alternative explanation of such decisions: if individuals' errors in assessing the likely effects of proposed policies are correlated, democratic decision-making can produce inefficient outcomes even in the absence of distributional conflicts or heterogeneous preferences. Choosing candidates from among the best informed members of the population does not remedy the problems created by such errors, but subsidizing information and exposing representatives to information after their election do. Concentration of power has ambiguous effects. Finally, the presence of correlated errors tends to create multiple equilibria in political institutions.

Rouse, Cecilia

TI Income, Schooling, and Ability: Evidence From a New Sample of Identical Twins. AU Ashenfelter, Orley; Rouse, Cecilia.

Rudebusch, Glenn D.

TI Opportunistic and Deliberate Disinflation Under Imperfect Credibility. AU Bomfim, Antulio N.; Rudebusch, Glenn D.

Russell, Jeffrey R.

PD April 1998. **TI** Econometric Analysis of Discrete-Valued Irregularly-Spaced Financial Transactions Data Using a New Autoregressive Conditional Multinomial Model. AU Russell, Jeffrey R.; Engle, Robert F. AA Russell: University of Chicago. Engle: University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 98/10; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG 20. PR \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. JE C22, C25, G12. KW Discrete Values. Time Series. Marked Point. High-Frequency Data.

AB This paper proposes a new approach to modeling financial transactions data. A new model for discrete valued time series is proposed in the context of generalized linear models. Since the model is specified conditional on both the previous state, as well as the historic distribution, the model is called the Autoregressive Conditional Multinomial (ACM) model. When the data are viewed as a marked point process, the Autoregressive Conditional Duration (ACD) model proposed in Engle and Russell (1998) allows for joint modeling of the price transition probabilities and the arrival times of the transactions. In this marked point process context, the transition probabilities vary continuously through time and are therefore duration dependent. Finally, variations of the model allow for volume and spreads to impact the conditional distribution of price changes. Impulse response studies show the long run price impact of a transaction can be very sensitive to volume but is less sensitive to the spread and transaction rate.

Ryder, Harl E.

TI Mortality Decline, Human Capital Investment, and

Economic Growth. AU Kelemlı-Ozcan, Sebnem; Ryder, Harl E.; Weil, David N.

Safieddine, Assem

PD June 1997. **TI** Debt and Corporate Performance: Evidence From Unsuccessful Takeovers. AU Safieddine, Assem; Titman, Sheridan. AA Safieddine: Michigan State University. Titman: University of Texas, Austin and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6068; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 34. PR \$5.00. JE G31, G32, G33, G34. KW Corporate Finance. Takeovers. Debt. Acquisitions. Firm Performance.

AB This paper examines how debt affects firms following failed takeovers. Using a sample of 573 unsuccessful takeovers, the authors find that, on average, targets significantly increase their debt levels. Targets that increase their debt levels more than the median amount reduce their levels of capital expenditures, sell off assets, reduce employment, increase focus and increase their operating cash flows. These leverage-increasing targets also realize superior stock price performance over the five years following the failed takeover. In contrast, those firms that increase their leverage the least show insignificant changes in their level of investment and their operating cash flows and realize stock price performance that is no different than their benchmarks. Those failed targets that increase their leverage the least, and fail to get taken over in the future, realize significant negative stock returns following their initial failed takeovers.

Sakakibara, Mariko

TI Japanese Research Consortia: A Microeconomic Analysis of Industrial Policy. AU Branstetter. Lee; Sakakibara, Mariko.

Samwick, Andrew

TI The Economics of Prefunding Social Security and Medicare Benefits. AU Feldstein, Martin; Samwick, Andrew.

Satchell, Stephen E.

TI Forecasting (Log) Volatility Models. AU Christodoulakis, George A.; Satchell, Stephen E.

Saunders, Anthony

PD November 1997. **TI** Mexico's Banking Crisis: Devaluation and Asset Concentration Effects. AU Saunders, Anthony; Wilson, Berry; Caprio, Gerard, Jr.. AA Saunders: New York University. Wilson: Federal Communications Commission. Caprio: The World Bank. **SR** New York University, Salomon Center, Working Papers: S/97/26; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. PG 35. PR \$5.00 each; \$100.00 yearly subscription. JE E31, G15, G21, G28. KW Devaluation. Banking. Mexico. Diversification. Financial Sector.

AB The sharp 1994-95 Mexican peso devaluation was followed by a financial-sector crisis, forcing the Mexican government to retake control of several banks and to grant substantial assistance to many other banks. This paper uses daily stock price data to test several hypotheses concerning the impact of devaluation. First, we use event-study methodology

to test whether some sectors of the Mexican economy were "devaluation-gaining" while other sectors were "devaluation-losing." Second, we test the linkage between the devaluation and the financial-sector crisis that ensued. Specifically, we test whether devaluation shocks were transmitted through the liability side versus the asset side of bank balance sheets. Our results suggest that governments should consider putting minimum diversification guidelines on bank portfolios.

Saxman, M. Christian

TI The Investment Performance of Defaulted Bonds and Bank Loans: 1987- 1997 and Market Outlook. **AU** Altman, Edward I.; Saxman, M. Christian.

Schnabel, Reinhold

TI Social Security and Retirement in Germany. **AU** Borsch-Supan, Axel; Schnabel, Reinhold.

Schnure, Calvin

PD January 1998. **TI** Who Holds Cash? And Why? **AA** Federal Reserve Board. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1998/13; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 15. **PR** no charge. **JE** E22, G31, G32. **KW** Investment. Cash Holdings. Agency Problems. Corporate Finance.

AB The existing literature on investment and cash flow has tended to take the financial characteristics of firms as exogenously given, and then relate these characteristics to firm investment behavior. The author turns this approach on its head and takes real characteristics of the firm as given and examines patterns of cash holdings using firm-level data on nonfinancial firms from COMPUSTAT. First the author establishes stylized facts about cash holdings, then investigates possible motivations for firm behavior. Cash holdings range widely, and are systematically related to firm size, industry and whether or not the firm has borrowed in the public bond market. Cross-sectional regressions indicate that cash holdings are positively correlated with proxies for agency problems, suggesting that firms that cannot borrow easily due to these agency problems hold greater cash stocks. The data on cash holdings prove useful in focusing more closely on firms likely to become constrained.

Schoeni, Robert F.

TI Health Care Prices, Health and Labor Outcomes: Experimental Evidence. **AU** Dow, Will; Gertler, Paul; Schoeni, Robert F.; Strauss, John; Thomas, Duncan.

PD March 1997. **TI** The Effects of Immigration on the Employment and Wages of Native Workers: Evidence from the 1970's and 1980's. **AA** RAND Corporation. **SR** RAND Corporation Report: DRU/1408/IF; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 37. **PR** no charge. **JE** F22, J21, J23, J31, J61. **KW** Alien Labor. Immigrants. Wages. Employment. Labor Force.

AB The effects of immigrants on the employment and wages of native-born workers during the 1970's and 1980's are estimated. Differences are found across skill and demographic groups, and across time, with the largest effects on the least

skilled workers. Estimates imply that the 5 percentage point increase between 1970 and 1990 in the share of the workforce that was foreign-born led to a decline in the weekly wages of high school dropouts of at most 10 percent. The effects on employment and participation are also sizable for some demographic/skill groups. Controlling for cost-of-living and addressing endogeneity in the "area analyses" approach are found to be crucial, reversing the sign of the estimated effects in several instances. While the effects on the least educated workers may be substantial, the economy-wide effects are small.

TI Social Security, Economic Growth, and the Rise in Independence of Elderly Widows in the 20th Century. **AU** McGarry, Kathleen; Schoeni, Robert F.

Schuhmacher, Joachim

PD January 1998. **TI** Choice of Maturity and Financial Intermediation. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/571; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. **PG** 49. **PR** no charge. **JE** D82, G21, G32, G33. **KW** Maturity Structure. Financial Intermediation. Debt. Investment.

AB Firms face the problem of choosing a debt maturity structure when financing an investment project. In addition, they have to decide which financing source to take. The aim of this article is firstly to give an explanation for the differing maturity choices by firms. As is shown below, the maturity choice depends mainly on the probability of realization of the cash flow after each period. This means that firms prefer financing congruent to the realizations of the cash flow. Secondly, this article explains the advantage of using a financial intermediary. It is shown that the financing source depends on the maturity choice. If a firm finances short-term it prefers bank loans whereas public debt is chosen by firms financing long term.

PD October 1998. **TI** Seniority Structure and Financial Intermediation. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/583; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. **PG** 36. **PR** no charge. **JE** D82, G21, G32, G33, L14. **KW** Seniority Structure. Financial Intermediation. Asymmetric Information. Debt Contracts.

AB The financial structure of firms is diverse. Firms issue many different types of financial claims. This article focuses on the seniority structure of debt contracts. It is outlined under what conditions firms can improve the outcome of their financial decisions by choosing seniority structure. The main reason for issuing debt contracts with different priority is that in case of financial distress firms only have to renegotiate with a smaller number of creditors. This outcome makes observation of the firm's condition by creditors more likely. If observation occurs seniority decreases observation costs. But observation can also harm the owner so that seniority could be inferior to a debt structure that treats all creditors identically. Later on we introduce a financial intermediary into the model. It is outlined how a financial intermediary can be welfare improving on the junior level.

Schummer, James

PD December 1997. **TI** Manipulation through Bribes. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1207; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 19. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C71, D60, D70. **KW** Allocation Rules. Bribery. Valuation Functions. Bribe Proofness. Game Theory.

AB The authors consider allocation rules that choose both a public outcome and transfers, based on the agents' reported valuations of the outcomes. Under a given allocation rule, a bribing situation exists when one agent could pay another to misreport his valuations, resulting in a net gain to both agents. A rule is bribe-proof if such opportunities never arise (including the case in which the briber and bribee are the same agent). The central result is that under a bribe-proof rule, regardless of the domain of admissible valuations, the payoff to any one agent is a continuous function of any other agent's reported valuations. The authors then show that on connected domains of valuation functions, if either the set of outcomes is finite or each agent's set of admissible valuations is smoothly connected, then an agent's payoff is a constant function of other agents' reported valuations.

Schwabe, Kurt A.

TI Does Nature Limit Environmental Federalism?
AU Smith, V. Kerry; Schwabe, Kurt A.; Mansfield, Carol.

Schweitzer, Mark E.

TI Identifying Inflation's Grease and Sand Effects in the Labor Market. **AU** Groshen, Erica L.; Schweitzer, Mark E.

Scott Morton, Fiona M.

PD August 1997. **TI** The Objectiveness of the FDA's Office of Generic Drugs. **AA** University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6143; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** L51, L65. **KW** Industrial Organization. Regulation. FDA. Drugs.

AB The author uses variation in approval time for generic drugs to shed light on the objectives of the federal agency in charge of granting entry permission for these drugs (FDA). Applications belonging to firms later found to have engaged in fraud or corruption were approved nine months faster on average, indicating that illegal behavior was effective in reducing approval times. The FDA approved applications for large revenue markets faster; this is the only evidence that the agency is taking consumer surplus into account, but it is also consistent with a response to producer surplus and application quality. Order of entry into a drug market is insignificant in predicting approval times. The FDA appears to avoid complaints from constituent firms by preserving the entry order of applications. Overall, the results provide most support for an agency responding to bureaucratic preferences, complaints from constituent firms, and risk to consumers.

Sedjo, Roger A.

PD February 1997. **TI** Models Needed to Assist in the Development of a National Fiber Supply Strategy for the 21st Century: Report of a Workshop. **AU** Sedjo, Roger A.; Goetzl, Alberto. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 97/22; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 121. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** C62, L73, Q21, Q23. **KW** Timber Models. Market Forecasting. Wood Fiber. Projections.

AB This discussion paper reports on a Workshop on Wood Fiber Supply Modeling held October 3-4, 1996 in Washington, D.C. The purpose of this discussion paper is to provide an overview of some of the modeling work being done related to timber supply modeling and some of the issues related to the more useful application of wood fiber supply and projections models. This paper includes brief presentations of three commonly used long-term timber projections and forecasting models: the Timber Assessment Market Model (TAMM) of the Forest Service; the Cintrafor Global Trade Model (CGTM) of the University of Washington; and the Timber Supply Model (TSM) of Resources for the Future. Also, issues related to the usefulness of the models are addressed as well as a discussion of some applications of other timber or fiber projection models. The usefulness of the models is addressed from both a technical perspective and also from the perspective of their usefulness to various model users.

TI An Analysis of Global Timber Markets. **AU** Sohngen, Brent; Mendelsohn, Robert; Sedjo, Roger A.; Lyon, Kenneth.

PD August 1997. **TI** The Forest Sector: Important Innovations. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 97/42; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 50. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** O31, O32, Q23. **KW** Productivity. Forest Plantations. Timber Extraction. Technological Innovation.

AB This paper looks at technical change in forest extraction. On average, labor productivity is found to have been increasing in recent decades. However, total factor productivity in the U.S. has declined in recent years. In addition, the study finds that a substantial shift from harvesting old-growth forests toward intensive forest plantations is underway. Plantations allow for high productivity in tree growing and can offset decreased wood availability due to the inaccessibility and high costs of many old- and second-growth forests. The decreased accessibility reflects not only the impacts of past logging but, perhaps more importantly, the increase in forests in protected area set-asides. Additionally, natural forests face increasingly stringent regulations on logging and forest management activities. High-yield intensively managed forests, on well located, high productivity sites, offer the potential of obtaining high yields while using relatively small land areas by allowing the near full output potential of practices including species selection, fertilization and pest control. Finally, tree planting creates the opportunity to apply genetic improvements to the tree stock thereby further increasing growth productivity and controlling tree characteristics.

Seethamaraju, Chandrakanth

TI Individual-Firm Style Loadings, Unrecorded Economic

Assets and Systematic Risk. AU Ballester, Marta; Livnat, Joshua; Seethamaraju, Chandrakanth.

Shachat, Jason M.

PD December 1997. TI Unobserved Heterogeneity and Equilibrium: An Experimental Study of Bayesian and Adaptive Learning in Normal Form Games. AU Shachat, Jason M.; Walker, Mark. AA Shachat: University of California, San Diego. Walker: University of Arizona. SR University of California, San Diego Department of Economics Working Paper: 97/33; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG 42. PR \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. JE C11, C73, C92. KW Experiments. Learning. Games. Unobserved Heterogeneity.

AB We describe an experiment based on a repeated two-person game of incomplete information designed so that Jordan's Bayesian model of learning in games and the best response model make completely opposite predictions. Econometric analysis of the experimental data, using the maximum likelihood procedure introduced by El Gamal and Grether, reveals clear heterogeneity in the subjects' learning behavior. The heterogeneity is not diffuse, however: the subjects follow only a few decision rules for basing their play on their information, and the decision rules have simple cognitive interpretations. We show that the heterogeneity can be explained as an equilibrium of the repeated game. Although the repeated game has many equilibria, including a unique pure strategy equilibrium, we find that the only equilibrium consistent with the data is one of the mixed strategy equilibria. This equilibrium is shown, surprisingly, to be consistent with Jordan's Bayesian model, in a "representative player" sense, each subject using a pure strategy, but the distribution of strategies among subjects coinciding with the mixed strategy equilibrium.

TI On the Irrelevance of Risk Attitudes in Repeated Two-Outcome Games. AU Wooders, John; Shachat, Jason M.

TI An Experimental Investigation of the Incentives to Form Agricultural Marketing Pools. AU Hoffman, Elizabeth; Libecap, Gary; Shachat, Jason M.

TI An Experiment to Evaluate Bayesian Learning of Nash Equilibrium Play. AU Cox, James C.; Shachat, Jason M.; Walker, Mark.

Shaffer, Sherrill

TI Credit Union Policies and Performance in Latin America. AU Westley, Glenn D.; Shaffer, Sherrill.

Shami, Roland G.

PD November 1997. TI Exponential Smoothing of Seasonal Data: A Comparison. AU Shami, Roland G.; Snyder, Ralph D. AA Monash University. SR Monash Department of Econometrics and Business Statistics Working Paper: 10/97; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. PG 8. PR no charge. JE C13, C22, C53, E40. KW Time Series. Exponential Smoothing. Holt-Winters Method. Structural Models. M-Competition.

AB A parsimonious method of exponential smoothing is introduced for time series generated from a combination of local trends and local seasonal effects. It is compared with the additive version of the Holt-Winters method of forecasting on a standard collection of real time series.

PD June 1998. TI Exponential Smoothing Methods of Forecasting and General ARMA Time Series Representations. AU Shami, Roland G.; Snyder, Ralph D. AA Monash University. SR Monash Department of Econometrics and Business Statistics Working Papers: 03/98; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. PG 13. PR no charge. JE C22, C53. KW Forecasting. Time Series. Exponential Smoothing. ARIMA Models.

AB The focus of this paper is on the relationship between the exponential smoothing methods of forecasting and the integrated autoregressive-moving average models underlying them. In this paper we derive, for the first time, the general linear relationship between their parameters. A method, suitable for implementation on computer, is proposed to determine the pertinent quantities in this relationship. It is illustrated on common forms of exponential smoothing. It is also applied to a new seasonal form of exponential smoothing with seasonal indexes which always sum to zero.

Sheiner, Louise

TI Managed Care and the Growth of Medical Expenditures. AU Cutler, David M.; Sheiner, Louise.

Sheldon, I. M.

TI The Non-Neutrality of Border Tax Adjustments for Environmental Taxes Under Imperfect Competition. AU McCorriston, S.; Sheldon, I. M.

Shi, Shanming

PD December 1997. TI Taking Time Seriously: Hidden Markov Experts Applied to Financial Engineering. AU Shi, Shanming; Weigend, Andreas S. AA Shi: University of Colorado. Weigend: New York University. SR New York University, Salomon Center, Working Papers: S/97/41; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. PG 9. PR \$5.00 each; \$100.00 yearly subscription. JE C22, C32, G12. KW Regime Switching. Hidden States. Transition Probabilities. Risk Estimation. Decision Technology.

AB Most traditional time series models are global models based on local time information: they assume that the state can be fully and locally characterized with a finite embedding space. Prediction then amounts to simple regression. Unfortunately, there are many situations in which simple regression is not sufficient to model the temporal structure in a time series. The authors introduce an architecture that they call Hidden Markov Experts. It is based on Hidden Markov Models used in speech recognition research. By introducing the concept of hidden states, Hidden Markov experts model time dependency of time series explicitly as a first-order Markov model with transitions between these hidden states. Within each state, local models are applied to estimate the probability density. This paper first discusses the statistical framework and the learning algorithm of Hidden Markov experts, then applies them to daily S&P500 data and to high frequency currency

exchange rate data.

Shi, Shouyong

TI Pricing with Frictions. **AU** Burdett, Kenneth; Shi, Shouyong; Wright, Randall.

Shih, Jhih-Shyang

TI Are We Overstating the Real Economic Costs of Environmental Protection? **AU** Morgenstern, Richard D.; Pizer, William A.; Shih, Jhih-Shyang.

Shin, Ku

PD June 1998. **TI** The Effects of the Changing Policy Environment on the Global Economy: A Small-Scale Model Approach. **AA** RAND Corporation. **SR** RAND Corporation Report: N/3595/RGSD/CUSJR; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 190. **PR** no charge. **JE** E22, E61, F17, F41, F42. **KW** International Relations. Policy Coordination. Trade Simulation. United States. Japan.

AB This note analyzes the effects of the "changing policy environment" - - the peace dividend, investment stimulation policy, political environment change, and economic cooperation -- on the global economy. Its goals are to (1) determine how shifts in the changing policies in the U.S. and Japan contribute to continued growth and reduced external imbalances, and (2) suggest strategies for a multi-country simulation model of the world economy. The first essay develops a multi-country simulation model of the world economy. The second essay describes the economic impact of the peace dividend on the world economy. The third essay analyzes U.S. and Japanese corporate investment behavior and the own-effects and cross-country spillovers of investment-oriented tax policy changes in the different regions. The fourth essay examines the implications of a "partisan theory" of macroeconomic policy for U.S.- Japan economic relationships. The final essay provides economic gains from coordinating policies among the industrial economies.

Shively, Thomas

TI Estimating Long-Term Trends in Tropospheric Ozone Levels. **AU** Smith, Michael S.; Yau, Paul; Shively, Thomas; Kohn, Robert.

Sill, Keith

PD December 1997. **TI** Regional Employment Dynamics. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 97/28; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. **PG** 26. **PR** no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** E24, E32, J23, J64, R23. **KW** Employment. Regional Employment. Business Fluctuations.

AB There is a widespread belief that different geographic regions of the United States respond differently to economic shocks, perhaps because of factors such as differences in the composition of regional output, adjustment costs, or other frictions. We investigate the comovement of regional employment series using a common features framework. Little

evidence is found to suggest that regions move synchronously, rather, it takes about three quarters before regions respond in a similar fashion to a common shock. We identify leading and lagging regions. None of the regional employment series appears to share a common, synchronous cycle with aggregate U. S. employment.

TI The Cyclical Behavior of Regional Per Capita Incomes in the Postwar Period. **AU** Carlino, Gerald; Sill, Keith.

Singleton, Kenneth J.

TI Specification Analysis of Affine Term Structure Models. **AU** Dai, Quang; Singleton, Kenneth J.

Sinn, Hans-Werner

PD June 1997. **TI** Eurowinners and Eurolosers: The Distribution of Seigniorage Wealth in EMU. **AU** Sinn, Hans-Werner; Feist, Holger. **AA** Sinn: University of Munich and National Bureau of Economic Research. Feist: University of Munich. **SR** National Bureau of Economic Research Working Paper: 6072; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** E58, F33, F42. **KW** Public Economics. Seigniorage. Central Banks. European Monetary Union.

AB The European Monetary Union (EMU) will involve socialization of the existing seigniorage wealth of the national central banks, because the Euro will have to be bought by these banks in exchange for assets which have been accumulated in the historical process of money creation. This socialization will create windfall gains for countries with relatively low monetary bases such as France and the U.K., and it will be disadvantageous for countries like Germany, the Netherlands and Spain which will suffer per capita wealth losses of between 406 and 182 ECU's. This paper quantifies the gains and losses in seigniorage wealth under alternative membership and bank regulation scenarios.

Siouclis, Anthony J.

TI A Comparison of Alternative Estimators for Binary Panel Probit Models. **AU** Harris, Mark N.; Macquarie, Lachlan R.; Siouclis, Anthony J.

Sisk, Jane

TI Selection, Marketing, and Medicaid Managed Care. **AU** Glied, Sherry; Sisk, Jane; Gorman, Sheila; Ganz, Michael.

Sjostrom, Tomas

TI Not Invented Here. **AU** Baliga, Sandeep; Sjostrom, Tomas.

TI Decentralization and Collusion. **AU** Baliga, Sandeep; Sjostrom, Tomas.

Smith, Aaron D.

TI Stochastic Permanent Breaks. **AU** Engle, Robert F.; Smith, Aaron D.

Smith, Jeffrey A.

TI The Sensitivity of Experimental Impact Estimates: Evidence From the National JTPA Study. **AU** Heckman, James J.; Smith, Jeffrey A.

Smith, Michael S.

PD May 1997. **TI** Analytic Small Sample Bias and Standard Error Calculations for Tests of Serial Correlation in Market Returns. **AU** Smith, Michael S.; Naik, Narayan Y. **AA** Smith: Monash University. Naik: London Business School. **SR** Monash Department of Econometrics and Business Statistics Working Papers: 06/97; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. **PG** 21. **PR** no charge. **JE** C12, C22, G10. **KW** Random Walk. Market Returns. Spherically Symmetric. Serial Correlation.

AB This article derives analytic finite sample approximations to the bias and standard error of a class of statistics which test the hypothesis of no serial correlation in market returns. They offer an alternative to both the widely used Monte Carlo approach for calculating the bias, as well as asymptotic standard error calculations. These approximations are calculated under the assumption that returns are spherically symmetrically distributed (such as Gaussian) and also under the weaker assumption that returns follow any arbitrary continuous distribution. The class of statistics examined here includes many of those employed in the finance and macroeconomics literature to test for the existence of random walk, including the variance ratio and the multi-period return regression on past returns. The accuracy of the approximations is benchmarked using simulated data, where arbitrarily tight estimates of the bias and standard error can be calculated. The approximations are then applied to adjust the statistics calculated using returns on the NYSE from 1926-1991.

PD November 1997. **TI** Bayesian Semiparametric Regression: An Exposition and Application to Print Advertising Data. **AU** Smith, Michael S.; Mather, Sharat K.; Kohn, Robert. **AA** Smith: Monash University. Mather: Booz, Allen & Hamilton, Chicago. Kohn: University of New South Wales. **SR** Monash Department of Econometrics and Business Statistics Working Papers: 13/97; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. **PG** 42. **PR** no charge. **JE** C11, C14, C15, C21, M31. **KW** Bayesian Analysis. Gibbs Sampling. Nonparametric Regression. Print Advertising. Subset Selection.

AB A new regression based approach is proposed for modeling marketing databases. The approach is Bayesian and provides a number of significant improvements over current methods. Independent variables can enter into the model in either a parametric or nonparametric manner, significant variables can be identified from a large number of potential regressors and an appropriate transformation of the dependent variable can be automatically selected from a discrete set of pre-specified candidate transformations. All these features are estimated simultaneously and automatically using a Bayesian hierarchical model coupled with a Gibbs sampling scheme. Being Bayesian, it is straightforward to introduce subjective information about the relative importance of each variable, or with regard to a suitable data transformation. The methodology is applied to print advertising Starch data collected from thirteen issues of an Australian women's monthly magazine. The empirical results highlight the complex and detailed relationships that can be uncovered using the methodology.

PD April 1998. **TI** Estimating Long-Term Trends in Tropospheric Ozone Levels. **AU** Smith, Michael S.; Yau,

Paul; Shively, Thomas; Kohn, Robert. **AA** Smith: Monash University. Yau and Kohn: University of New South Wales. Shively: University of Texas at Austin. **SR** Monash Department of Econometrics and Business Statistics Working Papers: 02/98; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. **PG** 26. **PR** no charge. **JE** C11, C13, C14, C15, Q25. **KW** Data Transformation. Focused Sampling. Nonparametric Regression. Reproducing Kernel. Radial Basis.

AB This paper estimates long-term trends in the daily maxima of tropospheric ozone at six sites in Texas, controlling for meteorological variables. A nonparametric regression is estimated where a general trivariate surface is used to model the relationship between ozone and key meteorological variables. Each function in the model is represented as a linear combination of basis functions located at all of the design points. A trivariate basis is used for the function representing the combined effect of temperature, wind speed and humidity, while univariate bases are used to represent the effects of wind direction and seasonality. The functions are estimated nonparametrically using a Bayesian hierarchical framework with a fractional prior. Due to the high dimensional representation of the signal, a Markov chain Monte Carlo sampling scheme is used for computation, employing Gibbs sub-chains that "focus" on those basis terms most likely to contribute to the signal. An appropriate data transformation is estimated simultaneously with the functions. The empirical results indicate that key meteorological variables explain most of the variation in daily ozone maxima through a nonlinear interaction. A simulation indicates that the Bayesian approach is substantially more efficient than MARS (Friedman, 1991).

PD June 1998. **TI** Nonparametric Seemingly Unrelated Regression. **AU** Smith, Michael S.; Kohn, Robert. **AA** Smith: Monash University. Kohn: University of New South Wales. **SR** Monash Department of Econometrics and Business Statistics Working Papers: 07/98; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. **PG** 31. **PR** no charge. **JE** C11, C14, C15, C31. **KW** Bayesian Hierarchical. Seemingly Unrelated. Markov Chain. Monte Carlo. Focused Sampling.

AB This paper presents a method for simultaneously estimating a system of nonparametric multiple regressions which may seem unrelated, but where the errors are potentially correlated between equations. We show that the prime advantage of estimating such a seemingly unrelated system of nonparametric regressions is that substantially less observations can be required to obtain reliable function estimates than if each of the regression equations was estimated separately and the correlation ignored. This increase in efficiency is investigated empirically using both simulated and real data. The method suggested here develops a Bayesian hierarchical framework where the regression function is represented as a linear combination of a large number of basis terms, the number of which is typically greater than the sample size. All the regression coefficients, and the variance matrix of the errors, are estimated simultaneously using their posterior means. The computation is carried out using a Markov chain Monte Carlo sampling scheme that employs a "focused sampling" step to combat the high dimensional representation of the function and a Metropolis-Hastings step to correctly

account for the distribution of the covariance matrix. The methodology is also easily extended to other nonparametric multivariate regression models.

Smith, V. Kerry

TI Monte Carlo Benchmarks for Discrete Response Valuation Methods. **AU** Huang, Ju Chin; Smith, V. Kerry.

PD March 1997. **TI** Does Nature Limit Environmental Federalism? **AU** Smith, V. Kerry; Schwabe, Kurt A.; Mansfield, Carol. **AA** Smith: Duke University and Resources for the Future. Schwabe: Ohio University. Mansfield: Duke University. **SR** Resources for the Future Discussion Paper: 97/30; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 33. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** H11, H23, Q28. **KW** Environmental Federalism. Cost-Benefit Analysis. Nutrient Control.

AB This research considers whether the principles developed to analyze the optimal jurisdiction for producing public goods can be applied in cases where regulations of private activities provide the primary means to deliver different amounts of public and quasi-public goods. The analysis evaluates how devolution affects the development of benefit cost analyses for regulations and the role of economic versus environmental factors in defining the extent of the regulatory market. Using a study of nutrient control for the Neuse River in North Carolina, the analysis develops area specific measures of the benefits and costs of regulations and illustrates how changes in the composition of the areas allowed to "count" for policy design can affect decisions about the levels of control judged to meet the net benefit test.

PD April 1997. **TI** Welfare Measurement and Representative Consumer Theory. **AU** Smith, V. Kerry; Von Haefen, Roger. **AA** Duke University. **SR** Resources for the Future Discussion Paper: 97/32; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 8. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** D11, Q26. **KW** Willingness to Pay. Random Utility. Aggregation.

AB This paper generalizes results from Anderson, De Palma, and Thisse (1992) linking individual random utility and aggregate representative individual demand models, to consider a comparable relation for the willingness to pay functions for quality attributes of marketed goods. It also suggests how the logic can be used to describe links between choice occasion and aggregate models (across occasions) for an individual.

Snyder, Ralph D.

PD October 1997. **TI** Prediction Intervals for ARIMA Models. **AU** Snyder, Ralph D.; Ord, J. Keith; Koehler, Ann B. **AA** Snyder: Monash University. Ord: Pennsylvania State University. Koehler: Miami University of Ohio. **SR** Monash Department of Econometrics and Business Statistics Working Papers: 08/97; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. **PG** 29. **PR** no charge. **JE** C13, C22, C53. **KW** ARIMA. Bayesian. Holt-Winters. Simulation. State Space.

AB The problem of constructing prediction intervals for

linear time series (autoregressive integrated moving average – ARIMA) models is examined. The aim is to find prediction intervals which incorporate an allowance for sampling error associated with parameter estimates. The effect of constraints on parameters arising from stationarity and invertibility conditions is also incorporated. Two new methods, based to varying degrees on first-order Taylor approximations, are proposed. These are compared in a simulation study to two existing methods: a heuristic approach and the "plug-in" method whereby parameter values are set equal to their maximum likelihood estimates.

TI Trend Stability and Structural Change: An Extension to the M1 Forecasting Competition. **AU** Inder, Brett A.; Snyder, Ralph D.

TI Exponential Smoothing of Seasonal Data: A Comparison. **AU** Shami, Roland G.; Snyder, Ralph D.

TI Exponential Smoothing Methods of Forecasting and General ARMA Time Series Representations. **AU** Shami, Roland G.; Snyder, Ralph D.

Sobel, Joel

PD September 1998. **TI** On the Dynamics of Standards. **AA** University of California, San Diego. **SR** University of California, San Diego Department of Economics Working Paper: 97/15R; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 36. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** D23, D71, D72, J62. **KW** Standards. Club Formation. Promotion.

AB This paper models the process of promotion or entry into a club, using a two-parameter family of promotion models. Promotion requires that at least n of the N judges think that the candidate is at least as good as r of the R members in the current group of promoted agents. Candidates minimize the cost of acquiring a D -dimensional characteristic, subject to being able to satisfy the promotion criteria. Candidates are assumed to specialize in one characteristic. Under weak assumptions governing which agents leave and the preferences of candidates who arrive, standards decline over time if $n/(N + 1) < 1/D$; and standards increase if $n/(N + 1) > (D - 1)/D$. If the population of promoted agents must contain one agent specializing in each dimension, then standards decline if $n/N < (r - 1)/R$; standards rise if $(n - 1)/N > r/R$.

Sobel, Matthew J.

PD January 1998. **TI** Discounting Almost Implies Risk Neutrality. **AA** New York University. **SR** New York University, Salomon Center, Working Papers: S/98/06; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. **PG** 23. **PR** \$5.00 each; \$100.00 yearly subscription. **JE** D11, D81, D84. **KW** Discounting. Risk Neutrality. Present Value.

AB Let the symbol for "at least as good as" order the M -dimensional vector-valued discrete-time stochastic processes $X = (X_{sub1}, X_{sub2}, \dots)$ on a probability space. This paper presents necessary and sufficient conditions for the existence of discount factors $0 < \beta_{subm} < 1$ and positive numbers v_{subm} , $m=1, \dots, M$, such that X is at least as good as Y if and only if (the sum of v_{subm} over $m=1$ to M) times (the sum of

((Beta subm) raised to t-1)(E(Xsubmt)-E(Ysubmt)) over t=1 to infinity) is greater than or equal to 0. So these conditions correspond to risk neutrality, decomposability by attribute, and maximization of the expected present value of rewards in many sequential decision processes.

Sohngen, Brent

PD May 1997. **TI** An Analysis of Global Timber Markets. **AU** Sohngen, Brent; Mendelsohn, Robert; Sedjo, Roger A.; Lyon, Kenneth. **AA** Sohngen: Ohio State University. Mendelsohn: Yale School of Forestry and Environmental Studies. Sedjo: Resources for the Future. Lyon: Utah State University. **SR** Resources for the Future Discussion Paper: 97/37; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 34. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** L73, Q21, Q23. **KW** Timber. Global Markets. Forest Plantations. Forecasting.

AB This paper presents a model of global timber markets that captures the evolution of a broad array of forest resources and timber market margins over time. These margins include the inaccessible northern and tropical margins, plantation establishment, and timberland management. A baseline case is presented and discussed. Five alternative scenarios are then presented. These scenarios allow us to consider several important questions about timber market behavior and the future supply of industrial fiber: (1) What happens along the northern and the tropical inaccessible margins? (2) What role do timber plantations play? and (3) How do shifts in management intensity interact with market forces? The baseline case suggests that both prices and harvests rise over the next 150 years, with most of the increased harvest coming from existing and newly established plantations. Future gains in harvests result mainly from intensification of management, through additional plantation establishment and higher levels of management on selected forests rather than higher harvests in currently inaccessible forests. Prices and harvests are most sensitive to alternative demand and plantation establishment scenarios, and less sensitive to costs of accessing extensive forests.

Solan, Eilon

PD September 1998. **TI** Correlated Equilibrium in Stochastic Games. **AU** Solan, Eilon; Vieille, Nicolas. **AA** Solan: Northwestern University. Vieille: Universite Paris. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1226; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 28. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C62, C73. **KW** Stochastic Games. Correlated Equilibrium. Recursive Games. Game Theory.

AB We study the existence of correlated equilibrium payoff in stochastic games. The correlation devices that we use are either autonomous (they base their choice of signal on previous signals, but not on previous states or actions) or stationary (their choice is independent of any data, and is drawn according to the same probability distribution at every stage). We prove that any n-player stochastic game admits an autonomous

correlated equilibrium payoff, and obtain a stronger result for recursive games. When the game is positive and recursive, a stationary correlated equilibrium payoff exists.

Sorensen, Bent E.

TI Consumption Smoothing through Fiscal Policy in OECD and EU Countries. **AU** Arreaza, Adriana; Sorensen, Bent E.; Yosha, Oved.

TI Permanent Income, Consumption, and Aggregate Constraints: Evidence from US States. **AU** Ostergaard, Charlotte; Sorensen, Bent E.; Yosha, Oved.

Spolaore, Enrico

TI Economic Integration and Political Disintegration. **AU** Alesina, Alberto; Spolaore, Enrico; Wacziarg, Romain.

Staiger, Robert W.

TI An Economic Theory of GATT. **AU** Bagwell, Kyle; Staiger, Robert W.

Stark, Tom

PD June 1998. **TI** A Bayesian Vector Error Corrections Model of the U.S. Economy. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 98/12; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. **PG** 56. **PR** no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** C11, C32, E27, E31, E37. **KW** Forecasting. Time Series. Inflation. Unemployment. Bayesian Analysis.

AB This paper presents a small-scale macroeconomic time-series model that can be used to generate short-term forecasts for United States output, inflation, and the rate of unemployment. Drawing on both the Bayesian VAR and vector error corrections (VEC) literature, I specify the baseline model as a Bayesian VEC. I document the model's forecasting ability over various periods, examine its impulse responses, and consider several reasonable alternative specifications. Based on a root-mean-square-error criterion, the baseline model works best, and I conclude that this model holds promise as a workhorse forecasting tool.

Starr-McCluer, Martha

TI Market Definition and the Analysis of Antitrust in Banking. **AU** Kwast, Myron L.; Starr-McCluer, Martha; Wolken, John D.

Stasz, Cathleen

PD 1998. **TI** Education and the New Economy. Views from a Policy Planning Exercise. **AU** Stasz, Cathleen; Chiesa, James. **AA** RAND Corporation. **SR** RAND Corporation Report: IP/170; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 7. **PR** no charge. **JE** H52, I21, I22, I28, J24. **KW** Education. Human Capital. Wages. Training.

AB Education is asked to help society meet a number of economic challenges, such as the perceived need for a workforce with varied skills and for equalizing the distribution of talent and wages across the population. During the 1990's,

policymakers have become increasingly attentive to the relationship between education and economic health and how best to ensure that the United States maintains its economic position relative to other nations. Analyzing this relationship in a manner helpful to policy formulation is a difficult and often controversial task. The fragmented and decentralized nature of our education and training system only adds to the difficulty. Policymakers and scholars argue over the extent to which the education and training system fails to prepare individuals to participate fully in the new economy, but few disagree that improvements are needed. Meanwhile, the locus of responsibility for effecting these improvements is shifting.

Stavins, Robert N.

TI The Positive Political Economy of Instrument Choice in Environmental Policy. **AU** Keohane, Nathaniel O.; Revesz, Richard L.; Stavins, Robert N.

PD March 1997. **TI** Private Options to Use Public Goods: The Demand for Fishing Licenses and the Benefits of Recreational Fishing. **AA** Harvard University and Resources for the Future. **SR** Resources for the Future Discussion Paper: 97/33; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 28. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** D13, H41, Q21, Q26. **KW** Contingent Valuation. Travel Cost. Household Production. Recreation. Fishing.

AB This paper describes the initial work from a project that seeks to develop and apply a new method for estimating the economic benefits of an environmental amenity. The method fits within the household production framework, and is based upon the notion of estimating the derived demand for a privately traded option to utilize a freely-available public good. In particular, the demand for state fishing licenses is used to infer the benefits of recreational fishing. Using panel data on state fishing license sales and prices for the continental United States over a fifteen-year period, combined with data on substitute prices and demographic variables, a license demand function is estimated with instrumental variable procedures to allow for the potential endogeneity of administered prices. The econometric results lead to estimates of the benefits of a fishing license, and subsequently to the expected benefits of a recreational fishing day. These preliminary estimates are compared with results from previous studies using contingent valuation and travel cost approaches.

Stein, Jeremy C.

TI What Do a Million Banks Have to Say About the Transmission of Monetary Policy? **AU** Kashyap, Anil K.; Stein, Jeremy C.

Stein, Jerome L.

PD December 1997. **TI** European Union: Convergence, Balanced Growth and the Steady State. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 97/28; Department of Economics, Box B, Brown University, Providence, RI 02912. **PG** 26. **PR** no charge. **JE** F15, F21, F23, O18, O21. **KW** Growth Models. Regional Growth. European Integration. Capital Movements. Factor Movements.

AB With the creation of the European Monetary Union, what can we expect will be the patterns of growth within Europe and between Europe and the rest of the G seven? First, we briefly

explain why the well known Solow model of a closed economy, as well as an open economy version, are inadequate to answer the questions posed. Second, we use the regional growth model to answer the questions concerning intra-European growth. Here, we draw upon the considerable evidence from the patterns of growth within the United States. Third, we use a model of capital market integration between two specialized countries with a unified capital market, to answer the questions concerning the patterns of growth between Europe and the rest of the G seven. The analyses in parts II and III explain the process of integration in the stages of convergence, balanced growth and steady state.

PD March 1998. **TI** Exchange Rate Misalignments and Crises. **AU** Stein, Jerome L.; Paladino, Giovanna. **AA** Stein: Brown University. Paladino: Instituto Mobiliare Italiano. **SR** Brown University, Department of Economics Working Paper: 98/07; Department of Economics, Box B, Brown University, Providence, RI 02912. **PG** 39. **PR** no charge. **JE** F31, F32, F41, F47. **KW** Exchange Rates. Misalignment. Foreign Debt. Balance of Payments. Crisis.

AB There is an economic logic to medium and longer-term movements in exchange rates, but short run variations are noise. We derive an objective measure of the real fundamentals, which determine the equilibrium medium to longer run exchange rates, and show how the actual exchange rate converges in a statistical sense to this equilibrium exchange rate. In a regime of adjustable pegs, speculative attacks and crises are some of the ways in which the convergence occurs. We apply our analysis to explain the movements in the French franc, German mark and Italian lira over the past twenty years. In the process we contrast the French/German with the Italian/German situations prior to the speculative attacks. The French franc was not overvalued relative to the DM before the nineteen ninety-two crisis. The Italian lira was overvalued by two standard deviations and the model predicts that it would be devalued.

Stijns, Jean-Philippe

TI Social Security and Retirement in Belgium. **AU** Pestieau, Pierre; Stijns, Jean-Philippe.

Stock, Wendy A.

TI Age Discrimination Laws and Labor Market Efficiency. **AU** Neumark, David; Stock, Wendy A.

Stoll, Michael A.

TI Are Suburban Firms More Likely to Discriminate Against African-Americans? **AU** Raphael, Steven; Stoll, Michael A.; Holzer, Harry J.

Strachan, Rodney W.

PD August 1998. **TI** Bayesian Estimation of the Reduced Rank Regression Model Without Ordering Restrictions. **AA** Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Papers: 09/98; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. **PG** 46. **PR** no charge. **JE** C11, C32, C53. **KW** Error Correction. Identification. Cointegration. Bayesian Analysis.

AB Bayesian estimation of reduced rank regressions required both global and local identification. To achieve global

identification, Bayesians have traditionally used zero-one identifying restrictions that require the researcher to impose an order on the variables. This ordering relies on a priori knowledge of which variables enter the reduced rank relations. For example, the cointegrating error correction model requires knowledge of which variables are $I(0)$. Incorrect ordering may result in an estimated space for the cointegrating vectors that does not contain the true cointegrating space, effectively misspecifying the model. This paper presents an estimation method which does not require a priori ordering -- by using restrictions similar to those used in maximum likelihood estimation of the reduced rank regression model generally, and in an error correction model specifically. Local identification is achieved by nesting the reduced rank model within a full rank model with a well behaved posterior distribution. This approach is due to Kleibergen (1997) and is consistent with the "data-translated likelihood" principle of Box and Tiao (1973). Results from Roy (1952) lead to the derivation of the Jacobian for the matrix transformation.

Strauss, John

TI Health Care Prices, Health and Labor Outcomes: Experimental Evidence. **AU** Dow, Will; Gertler, Paul; Schoeni, Robert F.; Strauss, John; Thomas, Duncan.

TI Health Care Prices, Health and Labor Outcomes: Experimental Evidence. **AU** Dow, Will; Gertler, Paul; Schoeni, Robert F.; Strauss, John; Thomas, Duncan.

Sueyoshi, Glenn T.

TI Ethnicity and the Intergenerational Transmission of Welfare Dependency. **AU** Borjas, George J.; Sueyoshi, Glenn T.

Suggitt, Heather J.

TI Default Rates in the Syndicated Bank Loan Market: A Mortality Analysis. **AU** Altman, Edward I.; Suggitt, Heather J.

Sullivan, Ryan

PD December 1997. **TI** Data-Snooping, Technical Trading Rule Performance, and the Bootstrap. **AU** Sullivan, Ryan; Timmermann, Allan; White, Halbert. **AA** University of California, San Diego. **SR** University of California, San Diego Department of Economics Working Paper: 97/31; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. **Website:** weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 25. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C12, C52, C63, G12, G14. **KW** Bootstrap. Data-Snooping. Reality Check. Technical Analysis.

AB Several studies conclude that technical analysis is a valid investment tool, however, the effects of data-snooping are not fully accounted for. This paper utilizes White's Reality Check bootstrap methodology (White (1997)) to evaluate simple technical trading rules, while quantifying the data-snooping bias and adjusting for its effect in the context of the full universe from which the trading rules were drawn. Hence, for the first time, a means of calculating a comprehensive test of performance across all trading rules is presented. This paper considers the study of Brock, Lakonishok, and LeBaron (1992),

expands their universe of 26 trading rules, applies the rules to 100 years of daily data on the Dow Jones Industrial Average, and determines the effects of data-snooping. During the sample period inspected by Brock, Lakonishok and LeBaron, the best technical trading rule is found to be capable of generating superior performance even after accounting for data-snooping. However, the best technical trading rule does not provide superior performance when used in the 10-year post-sample period. In a similar analysis, technical trading rules are applied to Standard and Poor's 500 futures contract. Once data-snooping effects are taken into account, there is no evidence that the best technical rule outperforms.

PD June 1998. **TI** Dangers of Data-Driven Inference: The Case of Calendar Effects in Stock Returns. **AU** Sullivan, Ryan; Timmermann, Allan; White, Halbert. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 98/16; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. **Website:** weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 33. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C12, C63, G11, G12. **KW** Calendar Rules. Data Snooping. Bootstrap. Financial Performance.

AB Economics is primarily a non-experimental science. Typically, we cannot generate new data sets on which to test hypotheses independently of the data that may have led to a particular theory. The common practice of using the same data set to formulate and test hypotheses introduces data-snooping biases that, if not accounted for, invalidate the assumptions underlying classical statistical inference. A striking example of a data-driven discovery is the presence of calendar effects in stock returns. There appears to be very substantial evidence of systematic abnormal stock returns related to the day of the week, the week of the month, the month of the year, the turn of the month, holidays, and so forth. However, this evidence has largely been considered without accounting for the intensive search preceding it. In this paper we use 100 years of daily data and a new bootstrap procedure that allows us to explicitly measure the distortions in statistical inference induced by data-snooping. We find that although nominal P-values of individual calendar rules are extremely significant, once evaluated in the context of the full universe from which such rules were drawn, calendar effects no longer remain significant.

Sunden, Annika E.

TI Pensions, Social Security, and the Distribution of Wealth. **AU** Kennickell, Arthur B.; Sunden, Annika E.

Supina, Dylan

TI Output Price and Markup Dispersion in Micro Data: The Roles of Producer Heterogeneity and Noise. **AU** Roberts, Mark J.; Supina, Dylan.

Svensson, Ingemar

TI Social Security, Occupational Pensions, and Retirement in Sweden. **AU** Palme, Marten; Svensson, Ingemar.

Taylor, Alan M.

TI Nonlinear Aspects of Goods-Market Arbitrage and Adjustment: Heckscher's Commodity Points Revisited.

AU Obstfeld, Maurice; Taylor, Alan M.

TI Measuring Market Integration: A Model of Arbitrage with an Econometric Application to the Gold Standard, 1879-1913. **AU** Prakash, Gauri; Taylor, Alan M.

Taylor, M. Scott

TI Is Free Trade Good for the Environment? **AU** Werner, Antweiler; Copeland, Brian R.; Taylor, M. Scott.

Temin, Peter

TI The Gold Standard and the Great Depression. **AU** Eichengreen, Barry; Temin, Peter.

Tennyson, Sharon

TI Consolidation and Efficiency in the U.S. Life Insurance Industry. **AU** Cummins, J. David; Tennyson, Sharon; Weiss, Mary A.

Thille, Henry

TI Transboundary Pollution and the Gains from Trade. **AU** Benarroch, Michael; Thille, Henry.

Tilton, John E.

PD September 1997. **TI** Productivity Growth and the Survival of the U.S. Copper Industry. **AU** Tilton, John E.; Landsberg, Hans H. **AA** Tilton: Colorado School of Mines and Resources for the Future. Landsberg: Resources for the Future. **SR** Resources for the Future Discussion Paper: 97/41; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 28. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** F14, L72, O31, Q30. **KW** Copper Industry. Productivity. Technological Change. Comparative Advantage.

AB Mining is widely viewed as an industry with mature and stable technologies. Companies and countries with the best deposits are the most productive and efficient producers. As these deposits are depleted, mining shifts to poorer quality ores, pushing productivity down and prices up. Copper mining in the United States, however, calls into question this conventional view. The U.S. industry suffered a major decline during the 1970's and early 1980's, but staged a remarkable revival, and today mines more copper than in 1970. A handful of companies achieved this recovery, largely through a wide range of cost-reducing innovations. These efforts, in turn, helped double labor productivity in copper mining during the 1980's. The known copper endowment of the United States hardly changed over this period, and had little to do with either the decline or the recovery. The experience of copper mining in the United States holds a number of lessons for countries competing in global mineral markets and striving to raise labor productivity and standards of living. In particular, it highlights the stimulating influence of global competition on industry productivity and comparative advantage, even in the mining sector where mineral endowment is widely thought to be of overriding importance.

Timmer, Jens

PD December 1997. **TI** Modeling Volatility Using State Space Models. **AU** Timmer, Jens; Weigend, Andreas S. **AA** Timmer: Universitat Freiburg, Germany. Weigend: New York University. **SR** New York University, Salomon Center,

Working Papers: S/97/37; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. **PG** 18. **PR** \$5.00 each; \$100.00 yearly subscription. **JE** C22, C32, F31, G12. **KW** Time Series. Volatility. Noise. Relaxation Times. Foreign Exchange.

AB In time series problems, noise can be divided into two categories: dynamic noise which drives the process, and observational noise which is added in the measurement process, but does not influence future values of the system. In this framework, empirical volatilities exhibit a significant amount of observational noise. To model and predict their time evolution adequately, the authors estimate state space models that explicitly include observational noise. They obtain relaxation times for shocks in the logarithm of volatility ranging from three weeks (for foreign exchange) to three to five months (for stock indices). In most cases, a two-dimensional hidden state is required to yield residuals that are consistent with white noise. The authors compare these results with ordinary autoregressive models (without a hidden state) and find that autoregressive models underestimate the relaxation times by about two orders of magnitude due to their ignoring the distinction between observational and dynamic noise.

Timmermann, Allan

TI Data-Snooping, Technical Trading Rule Performance, and the Bootstrap. **AU** Sullivan, Ryan; Timmermann, Allan; White, Halbert.

TI The Hazards of Mutual Fund Underperformance: A Cox Regression Analysis. **AU** Lunde, Asger; Timmermann, Allan; Blake, David.

TI Dangers of Data-Driven Inference: The Case of Calendar Effects in Stock Returns. **AU** Sullivan, Ryan; Timmermann, Allan; White, Halbert.

Titman, Sheridan

TI Debt and Corporate Performance: Evidence From Unsuccessful Takeovers. **AU** Safieddine, Assem; Titman, Sheridan.

Todter, Karl-Heinz

PD September 1997. **TI** Price Stability vs. Low Inflation in Germany: An Analysis of Costs and Benefits. **AU** Todter, Karl-Heinz; Ziebarth, Gerhard. **AA** Deutsche Bundesbank, Germany. **SR** National Bureau of Economic Research Working Paper: 6170; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 47. **PR** \$5.00. **JE** E31, E62. **KW** Monetary Economics. Inflation. Price Stability. Disinflation. Taxation.

AB The authors empirically investigate the costs and benefits of going from low inflation to price stability in the case of Germany. Recent empirical evidence on the sacrifice ratio suggests that the break-even point at which the permanent benefits of reducing the trend rate of inflation by 2 percent exceeds the temporary costs in terms of output losses is below 0.3% of GDP. The authors analyze the welfare implications of the interactions even of moderate rates of inflation with the distorting effects of the German tax system. Four areas of economic activity are considered: inter-temporal allocation of consumption, demand for owner-occupied housing, money

demand, and government debt service. The authors estimate the direct welfare effects of reducing the rate of inflation as well as the indirect tax revenue effects. They find that reducing the inflation rate by 2 percent permanently increases welfare. Finally, the optimal rate of disinflation is considered.

Toman, Michael

TI Assessing the Constraints and Opportunities for Private-Sector Participation in Activities Implemented Jointly: Two Case Studies from the US Initiative for Joint Implementation. **AU** Powell, Mark R.; Lile, Ronald D.; Toman, Michael.

TI The Benefits of Reduced Air Pollutants in the U.S. from Greenhouse Gas Mitigation Policies. **AU** Burtraw, Dallas; Toman, Michael.

Torero, Maximo

TI Labor Mobility from Academe to Commerce. **AU** Zucker, Lynne G.; Darby, Michael R.; Torero, Maximo.

Tornell, Aaron

PD July 1997. **TI** Rational Atrophy: The U.S. Steel Industry. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6084; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 37. **PR** \$5.00. **JE** C70, F13, L50, L61, O33. **KW** Productivity. Steel Industry. Trade Protection. Wages. Technological Innovation.

AB During the seventies and eighties the U.S. steel industry received trade protection. However, these rents were not used to improve competitiveness. Instead, they were reflected in higher wages and a greater share of profits invested in sectors not related to steel. Moreover, the steel industry failed to adopt technological innovations on a timely basis and was displaced by the minimills. The authors rationalize these puzzling outcomes using a dynamic game between workers and firms.

Treverton, Gregory F.

PD August 1998. **TI** Commercial Power Centers in Emerging Markets. **AU** Treverton, Gregory F.; Levaux, Hugh P.; Wolf, Charles, Jr.. **AA** RAND Corporation. **SR** RAND Corporation Report: MR/950; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 68. **PR** no charge. **JE** E61, E63, O23, P16. **KW** Economic Development. Capitalism. Developing Countries. Commercial Power Centers.

AB As the ongoing Asian crises underscore, policymaking and policies are becoming less the exclusive purview of governments and more the outcome of a complex process in which diverse groups participate actively, with varying degrees of influence. A commercial power center (CPC) is any group, combination, or coalition that seeks to influence the design and implementation of government economic policies to suit its interests. This analytic framework is used to assess the changing politics of economic policymaking -- to identify new groups with stakes and older ones that may be losing influence, and to evaluate their interaction in the making of government policy. The influence of selected CPC's in emerging markets matters for both what analysts look at and how they view those new targets. Asia's financial crisis drove home that lesson. The authors illustrate their methodology by examining four

countries that are in transition and that vary widely.

Trivedi, Pravin K.

TI Moment-Based Estimation of Latent Class Models of Event Counts. **AU** Deb, Partha; Ming, Xing; Trivedi, Pravin K.

Tzavalis, Elias

TI Inference for Unit Roots in Dynamic Panels in the Presence of Deterministic Trends. **AU** Harris, Richard D. F.; Tzavalis, Elias.

TI Tests of Structural Stability of Risk Premia and Returns Relationships. **AU** Karanikas, Evangelos; Tzavalis, Elias.

PD November 1997. **TI** Which Alternative to Choose: Does the Excess Sensitivity or a Time Varying Term Premium Explain the Failure of the Rational Expectations Hypothesis of the Term Structure? **AA** University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 97/11; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4JR, England. Website: www.ex.ac.uk/~BPEARSON/Research/DiscussionPapers/Econ/DiscussionPapers.html. **PG** 30. **PR** no charge.

JE C22, C23, C52, E43, G10. **KW** Term Structure. Rational Expectations. Vector Autoregression. Interest Rates.

AB Contrary to the predictions of the rational expectations hypothesis of the term structure, empirical evidence suggests that the term spread between long and short rates fails to forecast future long term rates although its forecasts of future short term rates are in the correct direction. This paper examines which of the two popular alternative hypothesis -- the excess sensitivity of the long term rate to the contemporaneous short term rate and the rational expectations hypothesis allowing for a time varying term premium -- can explain the failure of the pure version of the expectations theory. The author's results clearly reject the excess sensitivity hypothesis, and suggest that the anomalies of the term spread can be attributed to the different way that the term premium affects each of the term spread models. To remove the term premium biases, a simple model of the term premium is employed.

TI Inflation and Exchange-Rate Regimes in Mexico. **AU** Li, Carmen A.; Philippopoulos, Apostolis; Tzavalis, Elias.

TI Inference for Unit Roots in Dynamic Panels with Heteroscedastic and Serially Correlated Errors. **AU** Harris, Richard D. F.; Tzavalis, Elias.

Utikal, Inirida

PD August 1998. **TI** The Spanish Family Budget (EPF) Data and the Law of Demand. **AU** Utikal, Inirida; Utikal, Klaus J. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich 303 Discussion Paper: A/581; Sonderforschungsbereich 303, Universitat Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. **PG** 17. **PR** no charge. **JE** C14, D11, D12, D31, D81. **KW** Family Expenditures. Spain. Cross Sectional Data. Nonparametric Estimation. Demand.

AB A series of properties of the distribution of income and aggregated expenditure on goods and services has been postulated by W. Hildenbrand (1994) and others to hold. In this paper we infer on these properties from the Spanish Family

Budget Survey (EPF) of the years 1973, 1980, and 1990, using non-parametric statistical methods. This provides ample evidence for the Weak Axiom of Revealed Preference of the market demand function, and the Law of Demand to hold.

Utikal, Klaus J.

TI A Non Parametric Analysis of Distributions of Household Income and Attributes. **AU** Hildenbrand, Werner; Kneip, Alois; Utikal, Klaus J.

TI The Spanish Family Budget (EPF) Data and the Law of Demand. **AU** Utikal, Inirida; Utikal, Klaus J.

Valimaki, Juuso

TI Experimentation in Markets. **AU** Bergemann, Dirk; Valimaki, Juuso.

van Heuven, Marten

PD June 1998. **TI** Rethinking Europe. **AA** RAND Corporation. **SR** RAND Corporation Report: P/8016; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 17. **PR** no charge. **JE** F41, F42, O19. **KW** Europe. Economic Conditions. Social Conditions. Foreign Relations.

AB The author's task today is to help get you ready for your next encounter with Europe as American officials. He will try to sketch what he thinks the issues are and how they fit together. An important question is the relationship between the United States and Europe. It is increasingly apparent that a new Europe requires a new Euro-American partnership. But nostalgia for the Cold War habits of U.S. leadership remains. Commentator Josef Joffe remains convinced of the primacy of the United States' role in Europe. However, these views do not go unchallenged. So the stage for creating a new transatlantic partnership is not yet set. Yet the need for it is apparent. What can we expect? We will see change toward greater European awareness of and performance on the world stage.

van Mieghem, Jan A.

PD November 1997. **TI** Capacity Investment under Demand Uncertainty: Price vs. Quantity Competition. **AU** van Mieghem, Jan A.; Dada, Maqbool. **AA** van Mieghem: Northwestern University. Dada: Purdue University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1204; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 13. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D24, D42, D43, L12, L13. **KW** Pricing. Quantity. Capacity. Firm Strategy. Demand Uncertainty.

AB This article shows that under uncertainty, a firm's capacity investment decision crucially depends on the mode of market approach (price-setting vs. quantity-setting) and competition that follows investment. The authors model an industry in which firms have to make capacity investment decisions when demand is uncertain. First each firm must decide on its capacity investment level. Then, industry capacity levels are observed and firms engage in quantity or price competition. Finally, demand and revenues are realized. The

authors begin by considering a monopoly and show that the monopoly price given an uncertain demand curve can be higher or lower than the reference price when the demand curve is known at the start. Moreover price and firm value may fall or rise with increasing uncertainty. These results are compared with a setting where a monopolist sets quantity instead of price. The resulting investment fundamentally differs from the price-setting investment.

PD February 1998. **TI** Capacity Investment under Demand Uncertainty: The Option Value of Subcontracting. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1208; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 24. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C73, D24, L14, L23. **KW** Real Investments. Capacity Planning. Subcontracting. Outsourcing. Supply Contracts.

AB The authors study the financial value of subcontracting by analyzing a competitive stochastic investment game with recourse. The manufacturer and subcontractor decide separately on their capacity investment levels. Then demand uncertainty is resolved and both parties have the option to subcontract when deciding on their production and sales. First, price-only contracts are studied where an ex-ante transfer price is set for each unit supplied by the subcontractor. The sub-game perfect investment strategy is characterized and an outsourcing condition is presented. Manufacturer and supplier capacity levels are imperfect substitutes that, surprisingly, are more sensitive to changes in the cost structure than in the revenue structure. Second, the authors consider an incomplete contract, so that both parties negotiate over the subcontracting transfer. Finally, the third contract type is a state-dependent price-only contract for which an equivalence result with the bargaining contract is shown.

VandenBerg, Tim

TI Discouraging Federal Actions that Reduce the Value of Private Property: Evaluating Procedural and Financial Approaches. **AU** Hunt, Robert M.; VandenBerg, Tim.

Venkataramani Johar, Gita

TI Distinguishing Better from Poorer Decision Makers: A Study of Risk Propensity in the Face of Gains and Losses. **AU** Morrin, Maureen; Jacoby, Jacob; Venkataramani Johar, Gita; Kuss, Alfred; Mazursky, David.

TI Distinguishing Better from Poorer Decision Makers: A Study of Risk Propensity in the Face of Gains and Losses. **AU** Morrin, Maureen; Jacoby, Jacob; Venkataramani Johar, Gita; Kuss, Alfred; Mazursky, David.

Vernez, Georges

PD July 1998. **TI** Immigrant Women in the United States Labor Force. **AA** RAND Corporation. **SR** RAND Corporation Report: DRU/1888/AMF; Economics and Statistics Department, Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138. Website: www.rand.org. **PG** 219. **PR** no charge. **JE** J16, J21, J23, J61. **KW** Women. Alien Labor. Immigrants. Labor

Market.

AB The United States is one of less than handful of nations that has more immigrant women than immigrant men. In spite of the growing presence of immigrant women in the national labor force, little is known about the role they play in the national economy and about their performance and economic mobility. Until now, most of the attention of analysts and policymakers has been directed almost exclusively to immigrant men. This report represents a first effort to systematically describe the experience of immigrant women in the U.S. labor market over the past thirty years including a profile of the changing origin and characteristics of immigrant women, and a description of what they do, of where they work, of their labor market outcomes, and of their use of public services supporting their labor market activities.

Vieille, Nicolas

TI Correlated Equilibrium in Stochastic Games.
AU Solan, Eilon; Vieille, Nicolas.

Vohra, Rajiv

TI A Theory of Endogenous Coalition Structures.
AU Ray, Debraj; Vohra, Rajiv.

TI Auctions and Coalitions: Joint Bidding by Budget Constrained Buyers. **AU** Cho, In-Koo; Jewell, Kevin; Vohra, Rajiv.

Voith, Richard

PD March 1998. **TI** Transportation Investments in the Philadelphia Metropolitan Area: Who Benefits? Who Pays? And What are the Consequences? **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 98/07; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. **PG** 35. **PR** no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** H54, H73, L91, R41, R42. **KW** Transportation. Highways. Capital Investments. Philadelphia. Pennsylvania.

AB This paper examines the geographic distribution of transportation investments as well as the question of who pays for the investments in the Philadelphia metropolitan area, focusing on differences between the city and its surrounding Pennsylvania suburban counties. The authors present estimates of total, per capita, and per user benefits of highway investments, as well as fees generated by highway users at the county level. They also examine the combined highway and transit investments in the suburbs as a whole and in the city. There are three central findings in this analysis: 1) highway capital expenditures in the Greater Philadelphia region are significantly higher on a per capita basis in the Pennsylvania suburbs than in the city of Philadelphia. 2) Total highway user fees generated differ significantly across communities because of different auto ownership rates. 3) The per user differences between Philadelphia and its suburbs are smaller than per capita differences.

TI Measuring Housing Services Inflation. **AU** Crone, Theodore M.; Nakamura, Leonard I.; Voith, Richard.

PD December 1998. **TI** The Tax Treatment of Housing: Its Effects on Bounded and Unbounded Communities. **AU** Voith, Richard; Gyourko, Joseph. **AA** Voith: Federal

Reserve Bank of Philadelphia. Gyourko: University of Pennsylvania. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 98/23; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. **PG** 23. **PR** no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** H24, H31, R14, R21. **KW** Taxation. Housing. Regional Development.

AB This paper examines the potential impact of the federal tax treatment of housing, which provides tax advantages that increase with income and house value, on the pattern of development in the United States metropolitan areas. The authors argue that the tax treatment of housing is likely to have impacts on older, developed communities with fixed boundaries, such as central cities, that differ from the elastic supply of land in suburban areas. The authors show that the tax treatment of housing not only increases the incentives for lower density development, but it also provides incentives for increased sorting of high and low income households into separate communities. Given the large magnitude of annual subsidies to housing and the fact that these subsidies accrue to a relatively small share of homeowners, the authors believe that the impact of these subsidies on the pattern of metropolitan development is potentially very important.

Von Haefen, Roger

TI Welfare Measurement and Representative Consumer Theory. **AU** Smith, V. Kerry; Von Haefen, Roger.

Wacziarg, Romain

TI Economic Integration and Political Disintegration. **AU** Alesina, Alberto; Spolaore, Enrico; Wacziarg, Romain.

Wade, James B.

TI Dynamic Modeling of the Product Life Cycle in the Commercial Mainframe Computer Market, 1968-1982. **AU** Greenstein, Shane M.; Wade, James B.

Waldfoegel, Joel

TI Public Radio in the United States: Does it Correct Market Failure or Cannibalize Commercial Stations? **AU** Berry, Steven T.; Waldfoegel, Joel.

Walker, Mark

TI Unobserved Heterogeneity and Equilibrium: An Experimental Study of Bayesian and Adaptive Learning in Normal Form Games. **AU** Shachat, Jason M.; Walker, Mark.

TI An Experiment to Evaluate Bayesian Learning of Nash Equilibrium Play. **AU** Cox, James C.; Shachat, Jason M.; Walker, Mark.

Walls, Margaret

PD September 1997. **TI** Upstream Pollution, Downstream Waste Disposal, and the Design of Comprehensive Environmental Policies. **AU** Walls, Margaret; Palmer, Karen. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 97/51; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 17. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** Q25,

Q28. KW Life-Cycle Pollution. Deposit-Refund. Solid Waste. Virgin Materials.

AB Increasing attention has focused on "life-cycle" environmental problems associated with consumer products. Policymakers seek to design policies that simultaneously address solid waste disposal and upstream environmental problems. One suggested policy is an "advance disposal fee (ADF)", reflecting the full environmental costs of production. The authors' earlier model of production, consumption, and solid waste disposal (Palmer and Walls, 1997) is expanded to include upstream pollution problems such as manufacturing effluent and greenhouse gas emissions. A set of taxes and subsidies is derived for achieving the socially optimal levels of both upstream pollution and downstream waste disposal when Pigouvian taxes are infeasible. No single tax or subsidy, such as an ADF, can generate the optimum. However, output taxes can be combined with raw material input taxes and subsidies to achieve the same outcome as Pigouvian taxes. The optimal policy to address waste disposal concerns -- a deposit-refund -- is found to be lower when accounting for upstream pollution. Upstream pollution standards must be combined with output taxes to generate the optimum. When the upstream pollutant is greenhouse gas emissions, the specification of optimal alternative taxes and subsidies depends on the form of each firm's production function, and may be difficult to implement.

Warner, Andrew M.

PD September 1997. **TI** Mexico's 1994 Exchange Rate Crisis Interpreted in Light of the Non-Traded Model. **AA** Harvard University. **SR** National Bureau of Economic Research Working Paper: 6165; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 22. **PR** \$5.00. **JE** F10, F31. **KW** International Finance. Exchange Rates. Development.

AB This paper attempts to make the case that a 2-sector model using the familiar traded non-traded distinction offers a reasonably successful empirical account of why Mexico needed to devalue its exchange rate in 1994. This model provides a way to define and measure disequilibrium in the exchange rate, and thus may be useful in assessing the likelihood of an exchange rate crisis in other developing countries. The results suggest that Mexico's exchange rate was about 25 percent overvalued on the eve of its 1994 crisis, but was much closer to equilibrium by the end of 1996. The approach in this paper is compared with other ways of assessing disequilibrium in the exchange rate, based on purchasing power parity or monetary models of the exchange rate.

Warren, Paul

TI Interest Rates and the Price Level. **AU** Leith, Campbell; Warren, Paul; Wren-Lewis, Simon.

Wascher, William

TI Do Minimum Wages Fight Poverty? **AU** Neumark, David; Wascher, William.

Weder, Rolf

TI Trade in Intermediate Products, Pollution and Increasing Returns. **AU** Benarroch, Michael; Weder, Rolf.

Wei, Shang-Jin

TI "The Bigger They Are, The Harder They Fall": How

Price Differences Across U.S. Cities are Arbitraged. **AU** O'Connell, Paul G. J.; Wei, Shang-Jin.

Weigend, Andreas S.

TI A Bootstrap Evaluation of the Effect of Data Splitting on Financial Time Series. **AU** Lebaron, Blake; Weigend, Andreas S.

TI Modeling Volatility Using State Space Models. **AU** Timmer, Jens; Weigend, Andreas S.

PD December 1997. **TI** Exploiting Local Relations as Soft Constraints to Improve Forecasting. **AU** Weigend, Andreas S.; Zimmermann, Hans Georg. **AA** Weigend: New York University. Zimmermann: Siemens AG, Corporate Research. **SR** New York University, Salomon Center, Working Papers: S/97/38; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. **PG** 20. **PR** \$5.00 each; \$100.00 yearly subscription. **JE** G12, G13. **KW** Asset Pricing. Returns. Training. Conditional Expectation. Trading.

AB Predictive models for financial data are often based on a large number of plausible inputs that are potentially nonlinearly combined to yield the conditional expectation of a target, such as a daily return of an asset. This paper introduces a new architecture for this task: On the output side, the authors predict dynamical variables such as first derivatives and curvatures on different time spans. These are subsequently combined in an interaction output layer to form several estimates of the variable of interest. Those estimates are then averaged to yield the final prediction. Independently from this idea, on the input side, the authors propose a new internal preprocessing layer connected with a diagonal matrix of positive weights to a layer of squashing functions. These weights adapt for each input individually and learn to squash outliers in the input.

TI Nonlinear Trading Models Through Sharpe Ratio Maximization. **AU** Choey, Mark; Weigend, Andreas S.

TI Taking Time Seriously: Hidden Markov Experts Applied to Financial Engineering. **AU** Shi, Shanming; Weigend, Andreas S.

Weil, David N.

TI Intergenerational Earnings Mobility, Inequality, and Growth. **AU** Owen, Ann L.; Weil, David N.

TI Comparison Utility in a Growth Model. **AU** Carroll, Christopher D.; Overland, Jody; Weil, David N.

TI Population, Technology, and Growth: From the Malthusian Regime to the Demographic Transition. **AU** Galor, Oded; Weil, David N.

TI Mortality Decline, Human Capital Investment, and Economic Growth. **AU** Kelemlı-Ozcan, Sebnem; Ryder, Harl E.; Weil, David N.

Weinhold, Diana

PD August 1997. **TI** Openness, Specialization, and Productivity Growth in Less Developed Countries. **AU** Weinhold, Diana; Rauch, James E. **AA** Weinhold: Vanderbilt University. Rauch: University of California, San Diego and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6131; National Bureau of Economic Research, 1050

Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 15. PR \$5.00. JE F43, O11, O19, O40. KW International Trade. Openness. Growth. Specialization. Productivity.

AB Many empirical studies have found a positive relationship between openness and growth in per capita GDP in less developed countries, and economists have produced many explanations for this correlation. However, the existing studies are consistent with all of these theories and thus do not provide direct evidence in support of any one of them. Quah and Rauch (1990) show how increased openness to international trade can lead to increased specialization. Their models imply that increased specialization accelerates productivity growth by more fully realizing dynamic economies of scale. In order to test the hypothesis that specialization increases productivity growth in LDCs the authors first define a Herfindahl index of production specialization for the manufacturing sector in 39 countries. They then present a series of dynamic panel regressions controlling for country fixed effects which show that, for LDCs, the index of specialization is positively and significantly correlated with manufacturing productivity growth.

Weinstein, David E.

TI Economic Geography and Regional Production Structure: An Empirical Investigation. AU Davis, Donald R.; Weinstein, David E.

Weiss, Mary A.

TI Consolidation and Efficiency in the U.S. Life Insurance Industry. AU Cummins, J. David; Tennyson, Sharon; Weiss, Mary A.

TI Organizational Form and Efficiency: An Analysis of Stock and Mutual Property-Liability Insurers. AU Cummins, J. David; Weiss, Mary A.; Zi, Hongmin.

Weller, Paul

TI Tests of the Expectations Hypothesis of the Term Structure in a Model with Bayesian Learning. AU Bulkley, George; Harris, Richard D. F.; Weller, Paul.

Werner, Antweiler

PD July 1998. **TI** Is Free Trade Good for the Environment? AU Werner, Antweiler; Copeland, Brian R.; Taylor, M. Scott. AA University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 98/11; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1, Canada. Website: web.arts.ubc.ca/econ/dpintr.htm. PG 66. PR 30 cents per page U.S. and Canada, 40 cents per page International. JE F10, Q25, Q28. KW Pollution. International Trade. Environmental Policy.

AB This paper sets out a theory of how openness to international goods markets affects pollution concentrations. We develop a theoretical model to divide trade's impact on pollution into scale, technique and composition effects and then examine this theory using data on sulfur dioxide concentrations from the Global Environment Monitoring Project. We find international trade creates relatively small changes in pollution concentrations when it alters the composition, and hence the pollution intensity, of national output. Our estimates of the

associated technique and scale effects created by trade imply a net reduction in pollution from these sources. Combining our estimates of scale, composition and technique effects yields a somewhat surprising conclusion: freer trade appears to be good for the environment.

Wernstedt, Kris

PD July 1997. **TI** Land Use and Remedy Selection: Experience from the Field -- The Industri-Plex Site. AU Wernstedt, Kris; Probst, Katherine N. AA Resources for the Future. **SR** Resources for the Future Discussion Paper: 97/27; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. PG 46. PR Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. JE Q24, Q28, R52. KW Superfund. Land Use. Economic Development. Environmental Cleanup.

AB As the United States Congress debates revisions to the federal Superfund law, one of the most important topics of discussion is the degree to which cleanups at Superfund sites should be based on their expected future land use. Despite apparent interest in linking cleanup with land use, surprisingly little analysis has been done on what role land use already plays in selecting remedies. Resources for the Future (RFF) researchers have addressed the shortfall with case studies at three Superfund sites -- Abex Corporation in Portsmouth, Virginia, Industri-Plex in Woburn, Massachusetts, and Fort Ord near Monterey, California -- where land use has played a prominent role in the remedy selection process. Each of the case studies includes a description of: the contamination at the site; the different stakeholders involved in the remedy selection process; and the influence that land use considerations have had on this process. The three case studies are part of a larger research project funded in part by the U.S. Environmental Protection Agency. The final report for that project, *Linking Land Use and Superfund Cleanups: Uncharted Territory*, is available from RFF's publications office (202-328-5000) or on RFF's web page (www.rff.org).

PD September 1997. **TI** Land Use and Remedy Selection: Experience from the Field -- The Fort Ord Site. AU Wernstedt, Kris; Hersh, Robert. AA Resources for the Future. **SR** Resources for the Future Discussion Paper: 97/28; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. PG 50. PR Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. JE Q24, Q28, R52. KW Superfund. Land Use. Economic Development. Environmental Cleanup.

AB In September of 1994, the Army closed the Fort Ord Military Reservation, a Superfund site of some 28,000 acres located in Monterey County, California. Under the Base Closure and Realignment Act, nearly all of this land will be transferred to federal and state entities and to a number of bordering cities. Much of this property is valuable real estate -- coastal dunes, golf courses, and barracks that can be converted to apartments or dormitories. For the beneficiaries of these property transfers the Fort Ord cleanup is a modern day gold rush that is taking place as part of a Superfund cleanup. What effect have economic development pressures had on the cleanup process and on decisions about cleanup standards? This case study addresses this question by examining: (i) how the legal requirements regulating cleanup, community involvement and reuse have been implemented by the Army and the U. S.

Environmental Protection Agency; and (ii) the effectiveness of two groups created by legislation to integrate reuse planning and cleanup -- the Fort Ord Reuse Authority, an economic planning authority representing the area's local governments, and the Fort Ord Restoration Advisory Board, a citizens group mandated to advise the Army about the cleanup process.

PD October 1997. **TI** Basing Superfund Cleanups on Future Land Uses: Promising Remedy or Dubious Nostrum? **AU** Wernstedt, Kris; Hersh, Robert; Probst, Katherine N. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/03; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 20. **PR** Foreign: \$15 Air Mail, \$8.00 Surface. Domestic: \$10.00 First Class, \$6.00 Book Rate. **JE** Q24, Q28, R52. **KW** Land Use. Economic Development. Superfund.

AB Supporters of the effort to link cleanups at hazardous waste sites to the sites' expected land uses claim that amending language in the federal Superfund statute to allow this may yield a number of benefits. These include rationalizing the cleanup process and decreasing cleanup costs, promoting economic development in the local communities that host Superfund sites, and helping such communities exercise more control over the cleanups. However, interviews with Superfund stakeholders and a detailed case study call into question these arguments. The current role of land use in cleanup, uncertainties about whether economic development is likely at most Superfund sites, the long-run viability of institutional controls, the willingness of communities to accept cleanups that leave contamination on-site, and the nature of public involvement all suggest that the benefits of tying land use to remedy selection may not be so straightforward.

Westley, Glenn D.

PD December 1997. **TI** Credit Union Policies and Performance in Latin America. **AU** Westley, Glenn D.; Shaffer, Sherrill. **AA** Westley: Inter-American Development Bank. Shaffer: University of Wyoming. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 98/01; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. **PG** 28. **PR** no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** G21, O54. **KW** Credit Unions. Loans. Financial Institutions.

AB This paper explores empirical linkages between credit unions' (CUs') policies and their financial performance, as measured by loan delinquency and profitability, using a unique micro dataset of credit unions in three Latin American countries. The estimated translog profit function is generalized using a slack variable concept that parameterizes any systematic deviation from profit-maximizing behavior exhibited within the sample. In general, we find that performance depends in important ways on types of CU policy variables, some associated with the incentives of borrowers to repay and others that affect the CU's ability to screen loans.

Weymark, John A.

PD September 1998. **TI** A Generalization of Moulin's Pareto Extension Theorem. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 98/17; University of British

Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1, Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 6. **PR** 30 cents per page U.S. and Canada, 40 cents per page International. **JE** C60, D11. **KW** Binary Relations. Pareto Extension. Linear Orders.

AB In this note, it is shown that for any strongly complete and quasitransitive binary relation B on a set X , there exists a set of linear orders on X such that B is simultaneously the union of these linear orders and the Pareto extension relation generated by them. No assumptions about the cardinality of X are made. This result generalizes theorems established by Herve Moulin for finite X .

PD December 1998. **TI** Sprumont's Characterization of the Uniform Rule When All Single-Peaked Preferences Are Admissible. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 98/22; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1, Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 6. **PR** 30 cents per page U.S. and Canada, 40 cents per page International. **JE** D71, D82. **KW** Division Problem. Uniform Rule. Strategy-Proofness. Single-Peaked Preferences.

AB Sprumont (*Econometrica* 59 (1991), 509-519) has established that the only allocation rule for the division problem that is strategy-proof, efficient, and anonymous is the uniform rule when the domain is the set of all possible profiles of continuous single-peaked preferences. Sprumont's characterization of the uniform rule is shown to hold on any larger domain of single-peaked preferences.

Whelan, Karl

PD September 1997. **TI** Wage Curve vs. Phillips Curve: Are There Macroeconomic Implications? **AA** Federal Reserve Board. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/51; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 19. **PR** no charge. **JE** E24, E31, J31, J64. **KW** Inflation. Wage Inflation. Unemployment. Phillips Curve. Wages.

AB The standard derivation of the accelerationist Phillips curve relates expected real wage inflation to the unemployment rate and invokes a constant price markup and adaptive expectations to generate the accelerationist price inflation formula. Blanchflower and Oswald (1994) argue that microeconomic evidence of a low autoregression coefficient in real wage regressions invalidates the macroeconomic Phillips curve. This conclusion has been disputed by a number of authors on the grounds that the true autoregression coefficient is close to one. This paper shows that given the assumption of a constant price markup, micro-level real wage dynamics in fact have no observable implications for macro data on wage and price inflation.

PD November 1997. **TI** Unemployment and the Durational Structure of Exit Rates. **AA** Federal Reserve Board. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/54; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 32. **PR** no charge.

JE E24, J23, J31, J41, J64. **KW** Wage Bargaining. Employment Flows. Unemployment. Exit Rates.

AB This paper presents a simple model of wage bargaining and employment flows designed to address the effects of policies to increase the rate of exit to employment of the long-term unemployed. Exit rates from long and short-term unemployment have two effects on the unemployment rate: a positive one as high exit rates strengthen current employees' bargaining positions and thus wages and a negative one as faster outflows from unemployment reduce the stock of unemployed. Thus, there is a trade-off between the exit rate from long-term unemployment and the exit rate from short-term unemployment. The paper's principal result is that, in steady-state, increasing the exit rate from long-term unemployment reduces the unemployment rate. Dynamic simulations show that raising the exit rate of the long-term unemployed leads to a decrease in both the mean and variance of the unemployment rate.

White, Eugene N.

PD June 1997. **TI** The Legacy of Deposit Insurance: The Growth, Spread, and Cost of Insuring Financial Intermediaries. **AA** Rutgers University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6063; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 42. **PR** \$5.00. **JE** G21, G28, N22. **KW** Economic History. Monetary Economics. Deposit Insurance. Banking.

AB Without the Great Depression, the United States would not have adopted deposit insurance. While the New Deal's anti-competitive barriers have largely collapsed, insurance has become deeply rooted. This paper examines how market and political competition for deposits raised the level of coverage and spread insurance to all depository institutions. A comparison of the cost of federal insurance with a counterfactual of an insurance-free system shows that federal insurance ultimately imposed a higher cost but achieved political acceptance because of the distribution of the burden.

White, Halbert

TI Data-Snooping, Technical Trading Rule Performance, and the Bootstrap. **AU** Sullivan, Ryan; Timmermann, Allan; White, Halbert.

TI Dangers of Data-Driven Inference: The Case of Calendar Effects in Stock Returns. **AU** Sullivan, Ryan; Timmermann, Allan; White, Halbert.

White, Lawrence J.

TI Youth, Adolescence, and Maturity of Banks: Credit Availability to Small Business in an Era of Banking Consolidation. **AU** DeYoung, Robert; Goldberg, Lawrence G.; White, Lawrence J.

Whitelaw, Robert F.

PD October 1997. **TI** Stock Market Risk and Return: An Equilibrium Approach. **AA** New York University. **SR** New York University, Salomon Center, Working Papers: S/97/30; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. **PG** 40. **PR** \$5.00 each; \$100.00 yearly subscription. **JE** D51,

G11, G12. **KW** Stock Returns. Volatility. Consumption. Time Variation.

AB Recent empirical evidence suggests that expected stock returns are weakly related to the volatility of stock returns at the market level, and that this relation varies substantially over time. This evidence contradicts the apparently reliable intuition that risk and return are positively related and that stock market volatility is a good proxy for risk. This paper investigates the relation between volatility and expected returns in a general equilibrium, exchange economy. A relatively simple model, estimated using aggregate consumption data, is able to duplicate the salient features of the observed expected return/volatility relation. The key features of the model are the existence of two regimes with different consumption growth processes and time-varying transition probabilities between regimes. This structure generates time-varying correlation's between stock returns and the marginal rate of substitution; thus inducing variability in the short-run relation between expected returns and volatility and a weakening of the long-run relation.

PD November 1997. **TI** Time-Varying Sharpe Ratios and Market Timing. **AA** New York University. **SR** New York University, Salomon Center, Working Papers: S/97/29; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. **PG** 26. **PR** \$5.00 each; \$100.00 yearly subscription. **JE** E32, G11, G12. **KW** Sharpe Ratios. Equity Returns. Volatility. Time Variation. Business Cycles.

AB This paper documents predictable time-variation in stock market Sharpe ratios. Predetermined financial variables are used to estimate both the conditional mean and volatility of equity returns, and these moments are combined to estimate the conditional Sharpe ratio. In sample, estimated conditional Sharpe ratios show substantial time-variation that coincides with the variation in ex post Sharpe ratios and with the phases of the business cycle. Generally, Sharpe ratios are low at the peak of the cycle and high at the trough. In out-of-sample analysis, using 10-year rolling regressions, we can identify periods in which the ex post Sharpe ratio is approximately three times larger than its full-sample value. Moreover, relatively naive market-timing strategies that exploit this predictability can generate Sharpe ratios more than 70% larger than a buy-and-hold strategy.

TI The Best of Both Worlds: A Hybrid Approach to Calculating Value at Risk. **AU** Boudoukh, Jacob; Richardson, Matthew; Whitelaw, Robert F.

Whitesell, William

PD December 1997. **TI** Interest Rates and M2 in an Error Correction Macro Model. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/59; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 35. **PR** no charge. **JE** E31, E32, E41, E51, E52. **KW** Money Supply. Interest Rates. Money Demand. Monetary Policy. Inflation.

AB With annual data, real M2 is shown to have a surprisingly strong contemporaneous and leading relationship to GDP, robust to the inclusion of other explanatory variables. When combined and tested with parsimonious error correction

equations for money demand, price determination, and a monetary policy reaction function, an overall macroeconomic model is revealed with an unusually good fit, aside from a velocity shift adjustment needed for the early 1990's and better inflation performance than expected of late. A regime shift is evident in the stronger response of the Federal Reserve to inflation in the 1980's than in the previous two decades.

Will, Heide C. U.

PD July 1998. **TI** External vs. Internal Monitors: The Role of Restructuring Consequences and Information Technologies. **AA** University of Bonn. **SR** Universität Bonn Sonderforschungsbereich 303 Discussion Paper: A/576; Sonderforschungsbereich 303, Universität Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. **PG** 29. **PR** no charge. **JE** D23, D82. **KW** Contracts. Externalities. Interest Alignment. Monitoring. Agency Problems.

AB This paper analyzes the relative efficiency of internal and external monitors. It confirms the intuition that, if the principal and her employee share aligned interests, internal monitoring is superior to external monitoring; vice versa if interests diverge. This result is not robust for two alternative information technologies considered. If monitoring effort affects the frequency instead of the accuracy of produced signals, the optimal monitoring mode depends on the contingency policy that is adopted in case monitoring fails. If, by contrast, the obtained signals are non-verifiable, then internal monitoring is weakly dominant.

PD July 1998. **TI** Management Style in Decision Making: Top Down or Bottom up? **AA** University of Bonn. **SR** Universität Bonn Sonderforschungsbereich 303 Discussion Paper: A/577; Sonderforschungsbereich 303, Universität Bonn, Lennestrasse 37, D-53113 Bonn, Germany. Website: www.econ2.uni-bonn.de/sfb/papers. **PG** 37. **PR** no charge. **JE** D23, D82, J41, L23, M11. **KW** Governance Structure. Centralization. Delegation. Agency Problems.

AB This paper analyzes management style as a governance mechanism in agency relationships when the lack of verifiable information restricts the contracting possibilities. Specifically, it investigates which tasks a decision making process should comprise and how these should be organized, i.e. whether the evaluation of alternatives and/or the selection among them should be delegated to an informed expert or not. The optimal organization design is shown to depend non-monotonically on the divergence of objectives and the efficiency of available information technologies. Moreover, this paper demonstrates how the nature of the expert's technological advantage influences the underlying tradeoffs.

Williamson, Jeffrey G.

TI Were Trade and Factor Mobility Substitutes in History? **AU** Collins, William J.; O'Rourke, Kevin H.; Williamson, Jeffrey G.

Wilson, Berry

TI Mexico's Banking Crisis: Devaluation and Asset Concentration Effects. **AU** Saunders, Anthony; Wilson, Berry; Caprio, Gerard, Jr..

Wilson, James D.

TI Risk Assessment for National Natural Resource Conservation Programs. **AU** Powell, Mark R.; Wilson, James D.

Wise, David

TI Social Security Programs and Retirement Around the World. **AU** Gruber, Jonathan; Wise, David.

Witte, Ann Dryden

TI An Empirical Investigation of Firms' Responses to Minimum Standards Regulations. **AU** Chipty, Tasneem; Witte, Ann Dryden.

Wolf, Charles, Jr.

TI Commercial Power Centers in Emerging Markets. **AU** Treverton, Gregory F.; Levaux, Hugh P.; Wolf, Charles, Jr..

Wolf, Holger C.

TI Is Real Exchange Rate Mean Reversion Caused by Arbitrage? **AU** Campa, Jose M.; Wolf, Holger C.

Wolken, John D.

TI Market Definition and the Analysis of Antitrust in Banking. **AU** Kwast, Myron L.; Starr-McCluer, Martha; Wolken, John D.

Wong, Gary K. K.

PD June 1998. **TI** A New Approach to Model GNP Functions: An Application of Non-Separable Two-Stage Technologies. **AA** Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Papers: 08/98; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3168, Australia. Website: www.monash.edu.au/econometrics/. **PG** 33. **PR** no charge. **JE** D24, E23, F12, F15. **KW** Profit Function. GNP Function. Nominal Value-Added. Two-Stage Technologies. Regularity Conditions.

AB This paper shows that two-stage technologies can provide a general procedure for combining profit and value-added functions to obtain new specifications of import demand and output supply systems. In such technologies, it is assumed that imports interact with other exogenous variables to produce intermediate inputs, which are in turn used to produce final outputs. This new approach is used to specify and estimate the Australian Gross National Product (GNP) functions. The proposed framework has an attractive property: the capability of incorporating exogenous effects such as labor and capital endowments within a strong theoretical underpinning. The paper investigates a new GNP function for which the demand and supply systems are effectively globally regular. The results demonstrate that the new approach is feasible and promising while the estimated elasticities are not significantly different from those of the traditional models.

Wooders, John

PD December 1997. **TI** On the Irrelevance of Risk Attitudes in Repeated Two-Outcome Games. **AU** Wooders, John; Shachat, Jason M. **AA** Wooders: University of Arizona. Shachat: University of California, San Diego. **SR** University of California, San Diego Department of

Economics Working Paper: 97/34; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG 10. PR \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. JE C72, C92. KW Risk Attitudes. Repeated Games. Nash Equilibrium.

AB We analyze the equilibria of two-person supergames consisting of the sequential play of a finite collection of stage games, where each stage game is strictly competitive and has two outcomes for each player. We show that in any Nash equilibrium of the supergame, play at each stage is a Nash equilibrium of the stage game provided players' preferences over certain outcomes in the supergame satisfy a weak monotonicity condition. Thus, equilibrium play in such supergames is invariant for a large class of preferences and, in particular, it does not depend on the players' attitudes toward risk. This enables us to conclude, for example, that O'Neill's (1985) experimental test of Nash equilibrium adequately controls for risk attitudes, despite the fact that the supergame obtained by repeating his two-outcome stage game has more than two outcomes. We also establish an invariance result for games with more than two players when the solution concept is subgame perfection.

Woodford, Michael

TI Inflation Forecasts and Monetary Policy. AU Bermanke, Ben S.; Woodford, Michael.

Wren-Lewis, Simon

TI Interest Rates and the Price Level. AU Leith, Campbell; Warren, Paul; Wren-Lewis, Simon.

Wright, Randall

PD March 1998. TI A Note on Purifying Mixed Strategy Equilibria in the Search-Theoretic Model of Fiat Money. AA University of Pennsylvania. SR Federal Reserve Bank of Philadelphia Research Working Paper: 98/08; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 101 Independence Mall, Philadelphia, PA 19106. Website: www.phil.frb.org/econ/index.html. PG 12. PR no charge except overseas airmail, \$3.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. JE C62, C70, D71, D83, E40. KW Search. Fiat Money. Mixed Strategies. Game Theory. Evolutionary Dynamics.

AB The simple search-theoretic model of fiat money has three symmetric Nash equilibria: all agents accept money with probability one; all agents accept money with probability zero; and all agents accept money with probability y , where y is on the interval $(0,1)$. Here the authors construct a nonsymmetrical pure strategy equilibrium, payoff-equivalent to the symmetric mixed strategy equilibrium, where a fraction N , where N is on the interval $(0,1)$, of agents always accept money and $1-N$ never accepts money. Counter to what has been conjectured previously, the authors find N is greater than y . They also study evolutionary dynamics and show that the economy converges to monetary exchange if and only if the initial proportion of agents accepting money exceeds N .

TI Pricing with Frictions. AU Burdett, Kenneth; Shi, Shouyong; Wright, Randall.

Wu, Liuren

TI Accounting for Biases in Black-Scholes. AU Backus, David; Foresi, Silverio; Li, Kai; Wu, Liuren.

TI Predictable Changes in Yields and Forward Rates. AU Backus, David; Foresi, Silverio; Mozumdar, Abon; Wu, Liuren.

Xie, Danyang

TI Beyond Balance Growth. AU Kongsamut, Piyabha; Rebelo, Sergio; Xie, Danyang.

Xu, Ke-Jun

TI Nonlinear Wavelets Smoothing of Error Distribution in a Semiparametric Model. AU Li, Zhu-Yu; Chai, Gen-Xiang; Xu, Ke-Jun.

Yamashita, Takashi

TI Owner-Occupied Housing and the Composition of the Household Portfolio over the Life Cycle. AU Flavin, Marjorie; Yamashita, Takashi.

Yang, Chin Wei

TI A Bivariate Causality between Stock Prices and Exchange Rates: Evidence from Recent Asia Flu. AU Granger, Clive W. J.; Huang, Bwo-Nung; Yang, Chin Wei.

Yao, Jian

PD November 1997. TI Market Making in the Interbank Foreign Exchange Market. AA New York University. SR New York University, Salomon Center, Working Papers: S/98/03; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. PG 70. PR \$5.00 each; \$100.00 yearly subscription. JE F31, G21, G24. KW Foreign Exchange. Market Making. Commercial Banking. Inventory.

AB This paper studies the market making behavior of FX dealers in the interbank market which is characterized by high trade volume and decentralized market structure. The dataset for the empirical estimation is based on the complete trade records of a FX dealer at a major commercial bank over 25 trading days. The author finds evidence that incoming trades have information effects. However, he does not find evidence of price-shading as a tool for inventory control in inter-dealer trades. This is consistent with the view that quote shading signals a dealer's position, and further reveals information from his proprietary order flows. A representative FX dealer instead lays off most undesired inventories through outgoing trades against other dealers' quotes. Price impacts of such outgoing trades are minimized because the depth and low transparency of this market, together with the electronic dealing systems, allow a dealer to search effectively for the best prices.

PD November 1997. TI Spread Components and Dealer Profits in the Interbank Foreign Exchange Market. AA New York University. SR New York University, Salomon Center, Working Papers: S/98/04; Salomon Center, Stern School of Business, New York University, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. Website: www.stern.nyu.edu/salomon. PG 54. PR \$5.00 each; \$100.00 yearly subscription. JE F31, G21, G24. KW Foreign Exchange. Trading Profits. Spread Components.

Speculation.

AB This paper studies dealer trading profits, spread components and implications for market making costs for a representative dealer in the foreign exchange market. Though accounting for only about 14% of total trade volume, customer trades generate about 75% of the dealer's gross trading profits. *Inter-dealer trades have negligible profit implications for the dealer who maintains his function as a liquidity provider by taking inter-dealer trades and subsequently offsetting the trades at other dealers' quotes. The FX dealer engages in very limited speculation and seems to profit from his brief informational advantage upon observing order flows. This contradicts the popular conjecture that attributes high inter-dealer volume and short term market volatility to FX dealers' excessive speculation. Dealer trading profits are analyzed from another perspective by decomposing the spread components as in Glosten and Harris (1988). This study extends the existing approach to account for lagged quote adjustments to order flows.*

Yashiro, Naohiro

TI *Social Security and Retirement in Japan.* AU Oshio, Takashi; Yashiro, Naohiro.

Yau, Paul

TI Estimating Long-Term Trends in Tropospheric Ozone Levels. AU Smith, Michael S.; Yau, Paul; Shively, Thomas; Kohn, Robert.

Yelowitz, Aaron S.

PD August 1997. **TI** Why Did the SSI-Disabled Program Grow so Much? Disentangling the Effect of Medicaid. **AA** University of California, Los Angeles and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6139; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** \$5.00. **JE** H51, H53, I18, I38. **KW** Health Care. Public Economics. Medicaid. SSI.

AB The number of participants in the SSI program grew by 1.1 million from 1987-1993. This paper examines the role of Medicaid on the SSI participation decision. I use the rapid growth in average Medicaid expenditure as a proxy for its value. OLS estimates of Medicaid's effect may be biased because of omitted variables bias and measurement error. I therefore apply two-stage least squares to estimate Medicaid's effect, using average Medicaid expenditure for blind SSI recipients as an instrument. These estimates show that rising Medicaid expenditure significantly increased SSI participation among adults with low permanent incomes, explaining 20% of the growth.

Yi, Sang-Seung

TI Controlled Openness and Foreign Direct Investment. AU Aizenman, Joshua; Yi, Sang-Seung.

Yosha, Oved

TI Consumption Smoothing through Fiscal Policy in OECD and EU Countries. AU Arreaza, Adriana; Sorensen, Bent E.; Yosha, Oved.

TI Permanent Income, Consumption, and Aggregate Constraints: Evidence from US States. AU Ostergaard,

Charlotte; Sorensen, Bent E.; Yosha, Oved.

Zeckhauser, Richard J.

TI Adverse Selection in Health Insurance. AU Cutler, David M.; Zeckhauser, Richard J.

Zi, Hongmin

TI Organizational Form and Efficiency: An Analysis of Stock and Mutual Property-Liability Insurers. AU Cummins, J. David; Weiss, Mary A.; Zi, Hongmin.

Ziebarth, Gerhard

TI Price Stability vs. Low Inflation in Germany: An Analysis of Costs and Benefits. AU Todter, Karl-Heinz; Ziebarth, Gerhard.

Zimmermann, Hans Georg

TI Exploiting Local Relations as Soft Constraints to Improve Forecasting. AU Weigend, Andreas S.; Zimmermann, Hans Georg.

Zucker, Lynne G.

PD May 1997. **TI** Labor Mobility from Academe to Commerce. AU Zucker, Lynne G.; Darby, Michael R.; Torero, Maximo. **AA** Zucker and Darby: University of California, Los Angeles and National Bureau of Economic Research. Torero: University of California, Los Angeles. **SR** National Bureau of Economic Research Working Paper: 6050; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 37. **PR** \$5.00. **JE** J24, J44, J61, J62, O31. **KW** Productivity. Labor Mobility. Biotechnology. Knowledge Transfers. Duration Analysis.

AB Following a breakthrough discovery, scientific knowledge with natural excludability may be best transferred to industry by the labor mobility of top scientists from universities and research institutes to firms. This paper models labor mobility as a function of scientist's quality and reservation wage. Applying their model to bioscience and related biotechnology industries, the authors find broad support in a group duration analysis. The time a star scientist remains in a university before moving to a firm is significantly: decreased as the quality of the bioscientist and as his or her focus on human genetics increases; decreased as the expected frequency of offers increases with increases in local firms commercializing the technology and the percentage of ties to scientists outside the bioscientist's organization; decreased by experienced increase in productivity by other nearby star scientists who have already moved to firms.