

ABSTRACTS OF WORKING PAPERS IN ECONOMICS

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Adams, James D.

PD November 1996. **TI** Research Productivity in a System of Universities. **AU** Adams, James D.; Griliches, Zvi. **AA** Adams: University of Florida and National Bureau of Economic Research. Griliches: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5833; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 28. **PR** \$5.00. **JE** D24, L31, O31, O32. **KW** Productivity. Research and Development. Universities.

AB The focus of this paper is the research performance of a system of universities and sciences. The authors study the relationship between research output and R&D in eight different fields of science. They begin at the field level by examining the time series behavior of outputs measured by papers and citations in relation to R&D. At this level the authors find approximate parity between growth rates of papers and citations and the rate of growth of R&D. They then conduct an analysis at the university and field level. The authors now find that returns to R&D are diminishing in nearly every case. One explanation for this points to the importance of research spillovers between universities and fields, which are excluded at the university level but not at the system level. Another explanation is that errors in R&D are more important at the university level.

Aggarwal, Reena

TI The Equity Performance of Firms Emerging from Bankruptcy. **AU** Eberhart, Allan C.; Altman, Edward I.; Aggarwal, Reena.

Aidt, Toke Skovsgaard

PD August 1997. **TI** Political Internalization of Economic Externalities. The Case of Environmental Policy in a Politico-Economic Model with Lobby Groups. **AA** University of Aarhus. **SR** Aarhus Department of Economics Working Paper: 1997/10; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. **PG** 25. **PR** no charge. **JE** D78, H23, Q28. **KW** Environmental Policy. Lobby Groups. Lobbying. Environmental Economics.

AB This paper shows how competition between interests can internalize economic externalities groups. The key feature is that some lobby groups give political voice to environmental demands. We illustrate the basic ideas in a common agency model of politics, into which we introduce a negative output externality. We show that the politically optimal structure of environmental taxes incorporates the full Pigouvian

adjustment. However, since lobby groups care about the distribution of income as well as about efficiency, the equilibrium structure of taxes differs considerably from the set of Pigouvian taxes. In particular, organized sectors get a tax discount, while unorganized sectors are taxed at an inefficiently high rate. Hence, environmental lobbying has a huge beggar-thy-neighbor element.

PD November 1997. **TI** On the Political Economy of Green Tax Reforms. **AA** University of Aarhus. **SR** Aarhus Department of Economics Working Paper: 1997/20; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. **PG** 25. **PR** no charge. **JE** D72, D78, H23, H41. **KW** Political Economy. Green Tax Reforms. Environmental Policy. Lobby Groups.

AB This paper offers a political model of green tax reforms in which the use of the revenue from the ecotax is an integrated part. We use the model to explain why and when a link between an ecotax and cuts in other non-environmental taxes can be expected. In our model, green tax swaps arise because a producer lobby group, even if the use of the revenue does not affect profits per se, takes an interest in the allocation of revenue from the ecotax. The reason being that the lobby group uses the allocation of the revenue to reduce the 'price' of other political favors that it cares a lot about. To this end, the lobby group acts in the best interest of the voters, and to the extent the voters prefer tax cuts on labor income. The paper also analyses the environmental impact of various budgetary procedures and discusses to what extent the revenue from an ecotax can be used to create a constituency in favor of the environmental protection.

PD November 1997. **TI** Strategic Entry, Rent-Seeking and Transfers. **AA** University of Aarhus. **SR** Aarhus Department of Economics Working Paper: 1997/21; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. **PG** 23. **PR** no charge. **JE** D23, D72, D78. **KW** Rent-Seeking. Entry. Lobby Groups. Transfer Contests.

AB In this paper, we consider strategic entry decisions in a two-player political transfer contest, i.e. the prize is a transfer from one lobby group to another. The size of the transfer depends on the lobbying effort of the political active lobby groups. We show that the entry decision involves a trade-off between an influence loss and a strategic gain. The influence loss is related to the value of the foregone option to influence policymaking. The strategic gain is related to the strategic behavior of the competitor. The existence of symmetric equilibria in which both lobby groups enter the contest and

asymmetric equilibria in which only one lobby group enters is proved. In the latter type of equilibrium, rent-seeking expenditures are substantially reduced, and the strategic behavior of the active lobby group acts as a barrier to entry by rewarding the competitor for staying out of the contest.

Aizenman, Joshua

PD November 1996. **TI** New Activities, the Welfare Cost of Uncertainty and Investment Policies. **AA** Dartmouth College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5825; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 32. **PR** \$5.00. **JE** D81, E22, E62, J24. **KW** Policy Uncertainty. Multinational Firms. Productivity. Capital Goods. Disappointment Aversion.

AB This paper studies the effect of policy uncertainty on the formation of new activities in Romer's (1994) type of an economy, where productivity of labor increases with the number of capital goods. Adding a new capital good requires a capital specific set-up cost, invested prior to using the capital good. Agents are disappointment averse, putting greater utility weight on downside risk. Policy uncertainty is induced by revenue seeking administrations, which tend to tax the quasi-fixed capital, ignoring long-term costs. Disappointment aversion implies that investment, labor and capitalists' income drop at a rate proportional to the standard deviation of the tax rate. Hence, policy uncertainty induces first-order adverse effects, whereas policy uncertainty leads to second-order effects when consumers maximize the conventional expected utility. The adverse effects of policy uncertainty can be partially overcome by a proper investment policy.

PD November 1996. **TI** Volatility and the Investment Response. **AU** Aizenman, Joshua; Marion, Nancy P. **AA** Dartmouth College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5841; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 16. **PR** \$5.00. **JE** E22, F21, O16, O31, O40. **KW** International Trade. Investment. Growth. Volatility.

AB This paper uses the World Bank decomposition of aggregate investment shares into their private and public components to test for the correlation between volatility and investment in a set of developing countries. The authors uncover a statistically significant negative correlation between various volatility measures and private investment, even when adding the standard control variables. No such correlation is uncovered when the investment measure is the sum of private and public investment spending. Indeed, public investment spending is positively correlated with some measures of volatility. The authors also redo the Ramey and Ramey (1995) test for a correlation between investment and the standard deviation of innovations to a forecasting equation for growth. The authors find a negative and highly significant relationship between innovation volatility and private investment in developing countries. These findings suggest that the detrimental impact of volatility on investment may be difficult to detect using aggregate data.

Alberola, Enrique

PD November 1997. **TI** When May Peseta Depreciations Fuel Inflation? **AU** Alberola, Enrique; Ayuso, Juan; Lopez-

Salido, J. David. **AA** Banco de Espana. **SR** Banco de Espana. Servicio de Estudios. Documento de Trabajo: 9719; Banco de Espana. Seccion de Publicaciones. Negociado de Distribucion y Gestion. Alcala 50. 28104 Madrid. Website:www.bde.es. **PG** 12. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** F31, E31. **KW** Depreciation. Shocks. Inflation. SVAR.

AB In this paper we consider that the relationship between nominal exchange rates and prices depends on the nature of the shocks impacting the economy. In order to identify the sources of nominal exchange rates and relative price fluctuations in Spain we impose long-run restrictions on the dynamics of these variables through a 2-variable and 3-variable SVAR, respectively. According to our results, supply and real demand move nominal exchange rates and relative prices in opposite directions. Nominal shocks, however, move both variables in the same direction. Thus only under nominal shocks, which account for half the variability of the nominal exchange rate, may peseta depreciations fuel inflation.

PD November 1997. **TI** How do Countries Smooth Regional Disturbances? Risksharing in Spain: 1973-1993. **AU** Alberola, Enrique; Asdrubali, Pierfederico. **AA** Alberola: Banco de Espana. Asdrubali: Michigan State University. **SR** Banco de Espana. Servicio de Estudios. Documento de Trabajo: 9724; Banco de Espana. Seccion de Publicaciones. Negociado de Distribucion y Gestion. Alcala 50. 28104 Madrid. Website:www.bde.es. **PG** 14. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** E30, E63, R30. **KW** Risksharing. Stabilization.

AB We use a simple analytical framework to study how idiosyncratic production shocks are smooth through risksharing across Spanish provinces. By analyzing how production in the average province is successively smoothed until it is used as consumption, we find that half of the shocks have been smoothed in the period 1973-1993 and that this proportion is even higher in the last decade (1983-1993). Capital and credit market risksharing account for most of this result. Labor mechanisms play a negligible role and the smoothing due to the government tax-transfer system is quite small. Finally, we observe that the use of provincial prices instead of aggregate prices results in a reduction of the degree of smoothing in the economy.

PD January 1998. **TI** Unemployment Persistence, Central Bank Independence and Inflation Performance in the OECD Countries. **AU** Alberola, Enrique; Manuel Marques, Jose; Sanchis, Alicia. **AA** Banco de Espana. **SR** Banco de Espana. Servicio de Estudios. Documento de Trabajo: 9725; Banco de Espana. Seccion de Publicaciones. Negociado de Distribucion y Gestion. Alcala 50. 28104 Madrid. Website:www.bde.es. **PG** 17. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** E58, E61. **KW** Unemployment Persistence. Central Bank Independence. Inflation.

AB We test the Barro-Gordon model extended to allow for persistence in unemployment. First, we build an index of central bank independence and measures of persistence, and then we compare them with inflation performance in OECD countries. Our results show, as theory predicts, a robust negative relationship between the degree of independence and the level and variance of inflation. However, the extended model is not strongly endorsed by the data since the link

between inflation and unemployment persistence is weak. The reason is that there exists a strong correlation between unemployment persistence and independence. This may have important implications for the design of an antiinflationary policy.

Aldershof, Trea

PD April 1997. **TI** Female Labor Supply and the Demand for Housing. **AU** Aldershof, Trea; Alessie, Rob J. M.; Kapteyn, Arie. **AA** CentER for Economic Research and Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9746; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 26. **PR** no charge. **JE** C34, D12, J22, R21. **KW** Female Labor Supply. Housing Demand. Limited Dependent Variables. Simultaneous Equations.

AB This paper uses data of the 1989 wave of the Dutch Socio-Economic Panel to analyze the relationship between female labor supply and housing consumption. We estimate a conditional demand system with female labor supply and other consumption as the conditioning good. We conclude that separability of preferences between female labor supply and housing consumption cannot be rejected. Mortgage commitments have a significant positive effect on the labor supply of women.

Alessie, Rob J. M.

PD March 1997. **TI** Mandatory Pensions and Personal Savings in the Netherlands. **AU** Alessie, Rob J. M.; Kapteyn, Arie; Klijn, Frank. **AA** CentER for Economic Research and Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9739; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 42. **PR** no charge. **JE** D71, E21, H55. **KW** Savings. Pension Wealth. Life-Cycle Hypothesis.

AB The Netherlands has a relatively generous social security system and a wide coverage of individuals by private (occupational) pension schemes. Total household savings are rather high and fairly stable, although the amount of contractual savings appears to be going up at the expense of non-contractual (free) savings. Using an approach originally pioneered by Feldstein (1974) we employ micro data to investigate the displacement effect of social security and pension wealth on free household savings. It turns out that the data available are too noisy to make precise statements about the displacement effects. Our results do suggest, however, that a one-for-one displacement of free savings by social security is consistent with the data. For pensions such a complete offset is likely. This suggests that increase of coverage by private pensions is an effective way of raising savings.

TI Female Labor Supply and the Demand for Housing. **AU** Aldershof, Trea; Alessie, Rob J. M.; Kapteyn, Arie.

TI Household Commodity Demand and Demographics in the Netherlands: A Microeconomic Analysis. **AU** Kalwij, Adriaan; Alessie, Rob J. M.; Fontein, Peter.

Aliprantis, C. D.

PD June 1997. **TI** Incomplete Derivative Markets and

Portfolio Insurance. **AU** Aliprantis, C. D.; Brown, Donald J.; Werner, J. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1126R; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 13. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** G11. **KW** Portfolio Insurance. Derivative Markets. Incomplete Markets.

AB The authors present necessary and sufficient conditions on the asset span of incomplete derivative markets for insuring marketed portfolios. If the asset span is finite dimensional, there exists a polynomial-time algorithm for deciding if every marketed portfolio is insurable, moreover this algorithm computes the minimum cost insurance portfolio. In addition, the authors extend the Cox-Leland characterization of optimal portfolio insurance in complete derivative markets to asset spans of incomplete derivative markets where every marketed portfolio is insurable.

Allayannis, George

PD July 1997. **TI** Exchange Rate Exposure, Hedging, and the Use of Foreign Currency Derivatives. **AU** Allayannis, George; Ofek, Eli. **AA** Allayannis: University of Virginia. Ofek: New York University. **SR** New York University, Salomon Center Working Papers: S/97/24; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 24. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** D21, F31, F36, G13, G31. **KW** Hedging. Derivatives. Exchange Rates. Foreign Currency. Speculation.

AB The authors examine whether firms use foreign currency derivatives for hedging or for speculative purposes. Using the sample of all S&P 500 nonfinancial firms for 1993, they find strong evidence that firms use foreign currency derivatives for hedging; the use of derivatives significantly reduces the exchange-rate risk firms face. The authors also find that the decision to use derivatives depends on exposure factors (i.e., foreign sales and foreign trade) and on variables largely associated with theories of optimal hedging (i.e., size and R&D expenditures), and that the level of derivatives used depends only on a firm's exposure through foreign sales and trade.

Alonso-Sanchez, Francisco

PD November 1997. **TI** El Poder Predictivo de los Tipos de Interés Sobre la Tasa de Inflación Española. **AU** Alonso-Sanchez, Francisco; Ayuso-Huertas, Juan; Martínez-Pages, Jorge. **AA** Banco de España. **SR** Banco de España. Servicio de Estudios. Documento de Trabajo: 9722; Banco de España. Sección de Publicaciones. Negociado de Distribución y Gestión. Alcalá 50. 28104 Madrid. Website: www.bde.es. **PG** 18. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** E37, E52. **KW** Interest Rates. Monetary Policy. Cointegration.

AB This paper analyses the degree in which the information content of the term structure of riskless interest rates improves forecasting the Spanish inflation rate. The statistical analysis shows that ex-post real interest rates have some information content with regard to future inflation, and that interest rate spreads do not add any additional information. Thus the information content of the term structure is based on the long term relation between interest rates and inflation rates, and therefore its usefulness to predict inflation for periods shorter

than a year is small.

Altaf, Mir Anjum

PD June 1997. **TI** Measuring the Private Benefits from Connections to Public Water Systems in Developing Countries: A Case Study of the Punjab, Pakistan. **AU** Altaf, Mir Anjum; Jamal, Haroon; Liu, Jin Long; Smith, V. Kerry; Whittington, Dale. **AA** Altaf: The World Bank. Jamal: University of Karachi. Liu: National Central University. Smith: Duke University and Resources for the Future. Whittington: University of North Carolina. **SR** Duke University Department of Economics Working Papers: 97/24; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 43. **PR** no charge. **JE** H42, O22, Q28. **KW** Public Water. Developing Countries. Random Utility. Valuation Methods. Pakistan.

AB This paper reports the results of a model applying a random utility framework (RUM) to the connection decisions made by rural households in Pakistan to public water systems. Decisions taking place over a number of years are treated as instantaneous with appropriate adjustment for changes in the general price level. The findings support the model both for predicting connection decisions and estimating household willingness to pay (WTP) for such public water supplies. Comparisons based on estimates of WTP and connection decisions between RUM and contingent valuation estimates for independent villages support the framework as well.

Altman, Edward I.

PD September 1996. **TI** Corporate Bond and Commercial Loan Portfolio Analysis. **AA** New York University. **SR** New York University, Salomon Center Working Papers: S/97/12; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 25. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** G11, G21, G24, G32. **KW** Risky Debt Instruments. Portfolio Choice. Unexpected Loss.

AB In this paper the authors have presented a new approach to measure the return-risk trade-off in portfolios of risky debt instruments, whether bonds or loans. The use of complex, statistically based portfolio techniques to manage assets of financial institutions by fixed income portfolio money managers is very much in its early phase and will continue to evolve, perhaps more quickly in the near future. The authors' approach substitutes the concept of unexpected loss for the more traditional variance of return measure used in equity securities analysis. Preliminary empirical tests indicate some reason to be optimistic about this approach.

PD December 1996. **TI** Rating Migration of Corporate Bonds: Comparative Results and Investor/Lender Implications. **AA** New York University. **SR** New York University, Salomon Center Working Papers: S/97/03; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 42. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** G10, G32. **KW** Corporate Bonds. Public Debt. Credit Quality. Rating Migration.

AB Bond ratings are usually first assigned by rating agencies to public debt at the time of issuance and are periodically reviewed by the rating companies. If deemed warranted, changes in ratings are assigned after the review. A change in

rating reflects the agency's assessment that the company's credit quality has improved or deteriorated. A coincident effect, in some proximity to the date of rating change, is a change in the price of the issue. This article reports on an investigation of ratings changes (drift) over time as well as the implied impact on the price of the bond and on the investment strategies. The authors' analysis compares rating changes from the two major agencies, Moody's and S&P, over the period 1970-1995, as well as yield and duration results by rating class from 1985-1996. For the first time, results from several studies which have documented and analyzed these data patterns are contrasted.

PD 1997. **TI** Credit Risk Management: The Ironic Challenge in the Next Decade. **AA** New York University. **SR** New York University, Salomon Center Working Papers: S/97/09; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 8. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** Not available. **KW** Not available. **AB** Not available.

TI The Equity Performance of Firms Emerging from Bankruptcy. **AU** Eberhart, Allan C.; Altman, Edward I.; Aggarwal, Rccna.

Altshuler, Rosanne

PD October 1996. **TI** Balance Sheets, Multinational Financial Policy, and the Cost of Capital at Home and Abroad. **AU** Altshuler, Rosanne; Grubert, Harry. **AA** Altshuler: Rutgers University and National Bureau of Economic Research. Grubert: U.S. Department of the Treasury. **SR** National Bureau of Economic Research Working Paper: 5810; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 47. **PR** \$5.00. **JE** F23, F32, F41. **KW** Multinational Firms. Repatriation. Taxes. Financial Assets.

AB The authors use data from the balance sheets of controlled foreign corporations (CFC's) to study the real and financial behavior of U.S. multinational corporations. The balance sheet data allows the authors to study a broader range of financial flows between CFC's and parents than has been done previously. The authors' theoretical results confirm that financial assets, including the equity or debt of other CFC's, are attractive alternatives to repatriation and investment in real assets. They show that if the parent can borrow against its CFC's financial assets it can achieve the equivalent of a dividend repatriation. The authors' regression results confirm the importance of tax considerations in explaining CFC holdings of financial assets. The authors also find that CFC's with more debt distribute more dividends. This provides evidence that greater dividend distributions do not necessarily imply lower real investment by CFC's.

An, Mark Yuying

TI Human Capital, Entrepreneurship, and Farm Household Earnings. **AU** Yang, Dennis Tao; An, Mark Yuying.

Andersen, Torben M.

PD June 1997. **TI** Effort, Taxation and Unemployment. **AU** Andersen, Torben M.; Rasmussen, Bo Sandemann. **AA** University of Aarhus. **SR** Aarhus Department of Economics Working Paper: 1997/11; Department of

Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. PG 15. PR no charge. JE H22, J41, J51. KW Progressive Taxation. Wage Formation. Unemployment. Effort. Trade Unions.

AB The importance of the design of the income tax system for the incentive to supply effort is considered for both a situation where firms (efficiency wage model) or unions (monopoly union model) have the power to determine wages. A tax reform raising marginal taxes at all income levels and increasing (decreasing) average taxes at high (low) income levels may lead to higher wages, lower employment and higher unemployment under either wage determination regime.

PD August 1997. TI Persistency in Sticky Price Models. AA University of Aarhus. SR Aarhus Department of Economics Working Paper: 1997/19; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. PG 17. PR no charge. JE E32, E24, J31. KW Nominal Rigidities. Classical Neutrality. Staggering.

AB Nominal rigidities imply that nominal shocks have an impact effect which may be propagated by standard mechanisms. However, the nominal adjustment process may in itself be a propagation mechanism causing persistent effects of nominal shocks. This may be caused by inertia in nominal wage and price adjustment arising due to input-output networks or multiperiod nominal contracting as captured in models with staggered price/wage decisions. It has recently been contested whether staggering can account for persistency of any quantitative importance. This paper reviews the theory and empirical evidence on this issue and it is concluded that staggering may be a quantitative important propagation mechanism.

PD February 1998. TI Business Cycles and Fiscal Policy in an Open Economy. AU Andersen, Torben M.; Holden, Steinar. AA Andersen: University of Aarhus and Centre for Economic Policy Research. Holden: University of Oslo. SR Aarhus Department of Economics Working Paper: 1998/05; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. PG 31. PR no charge. JE E32, E63, F41. KW Stabilization Policy. Imperfect Competition. Demand Shocks. Supply Shocks.

AB The role of demand management policy is considered in a two-sector open economy model with price-taking firms and imperfect competition in the labor market. Demand management policies are shown to affect the equilibrium distribution of prices and hence output in the case of both supply (productivity) and demand (preferences) shocks. As agents are risk-averse, there is a welfare case for pursuing an active stabilization policy, and the optimal fiscal policy as well as the possibility of implementing this via automatic budget rules are discussed.

Anderson, James E.

PD November 1996. TI Trade Reform with a Government Budget Constraint. AA Boston College and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5827; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 34.

PR \$5.00. JE F10, F41. KW Budget Constraints. Trade Reform. Tariffs. Taxation. Fiscal Policy.

AB The standard theory of trade reform uses a passive government budget constraint, in which changes in tariff revenue are offset by changes in lump sum transfers. This paper offers a general framework for the analysis of trade reform when the government budget constraint is active, meaning that tariff revenue cuts must be offset by distortionary fiscal policy changes -- public good supply cuts or alternative tax increases. Useful and simple new expressions characterizing welfare improving trade reform compare the Marginal Cost of Funds (MCF) of trade taxes with the MCF of consumption taxes. The MCF expressions provide an intuitive index number which is operational with Computable General Equilibrium models. The theoretical analysis and an application to Korean data in 1963 both cast doubt on the desirability of tariff cuts in convex competitive economies with active government budget constraints.

PD December 1996. TI Effective Protection Redux. AA Boston College and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5854; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 32. PR \$5.00. JE D72, F13. KW International Trade. Investment. Tariffs. Political Economy.

AB This paper rehabilitates the concept of effective rate of protection for use in political economy. The usual definition corresponds to no economically interesting magnitude in general equilibrium. The effective rate of protection for a sector is redefined here as the uniform tariff which is equivalent to the actual differentiated tariff structure in its effect on rents to residual claimants in the sector. The new ERP permits a political economic ranking of how much protection is given across sectors, since higher uniform tariff equivalents imply higher losses of welfare sacrificed to interest groups. The new ERP converges to the old ERP under a very special set of assumptions, and elsewhere generalizes the ERP concept to any economic structure in which residual claims are defined. Numerical results for the new ERP are presented for the U.S. economy in 1982 using the USDA/ERS computable general equilibrium model.

Ando, Albert

PD January 1997. TI Cost of Capital for the United States, Japan, and Canada: An Attempt at Measurement Based on Individual Company Records and Aggregate National Accounts Data. AU Ando, Albert; Hancock, John; Sawchuk, Gary. AA Ando and Hancock: University of Pennsylvania and National Bureau of Economic Research. Sawchuk: Industry Canada. SR National Bureau of Economic Research Working Paper: 5884; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG not available. PR \$5.00. JE D24, E22, G31. KW Corporate Finance. Business Cycles. Capital Costs. Investment.

AB A conceptual basis is laid out for measuring the cost of capital for corporations from data typically available in countries such as the United States, Canada, and Japan. Attempts are made to carry out the measurement based both on the accounting records of individual companies and on the aggregate National Accounts data, supplemented by the market information on the price of equity shares. The authors find a

consistent pattern for the United States from both sets of data, and the real cost of capital after depreciation and before taxes is found to fluctuate around 10 to 11 percent without a persistent trend. Finally, the authors suggest that the high prices of land and the persistent real capital gains which companies enjoyed on their ownership of land until 1990 were an important cause leading to an underestimation of the cost of capital when the standard procedure is applied to Japanese data.

Andres, Javier

PD April 1997. **TI** Does Inflation Harm Economic Growth? Evidence for the OECD. **AU** Andres, Javier; Hernando, Ignacio. **AA** Andres: Banco de Espana and Universidad de Valencia. Hernando: Banco de Espana. **SR** Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9706; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcalá 50, 28104 Madrid. Website: www.bde.es. **PG** 26. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** E31, F43, O49. **KW** Inflation. Growth.

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 criticism on 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 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 June 1997. **TI** Estimation When a Parameter is on a Boundary: Theory and Applications. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1153; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 95. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** C13. **KW** Asymptotic Distribution. Equality Restrictions. Least Squares. Integrated Regressors. Semiparametric Estimator.

AB This paper establishes the asymptotic distribution of extremum estimators when the true parameter lies on the boundary of the parameter space. The boundary may be linear, curved, and/or kinked. The asymptotic distribution is a function of a multivariate normal distribution in models without stochastic trends and a function of a multivariate Brownian motion in models with stochastic trends. The results apply to a wide variety of estimators and models. Examples treated explicitly in the paper are (1) quasi-ML estimation of a random coefficients regression model with some coefficient variances equal to zero, (2) LS estimation of a regression model with nonlinear equality and/or inequality restrictions on the parameters and iid regressors, (3) LS estimation of an augmented Dickey-Fuller regression with unit root and time trend parameters on the boundary of the parameter space, (4) quasi-ML estimation of a GARCH(1,q*) or IGARCH(1,q*0 model with some GARCH MA parameters equal to zero.

PD August 1997. **TI** On the Number of Bootstrap Repetitions for Bootstrap Standard Errors, Confidence

Intervals, and Tests. **AU** Andrews, Donald W. K.; Buchinsky, Moshe. **AA** Andrews: Yale University. Buchinsky: Brown University. **SR** Yale Cowles Foundation Discussion Paper: 1141R; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 52. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** C12, C13, C14, C15. **KW** Bootstrap Repetitions. Excess Kurtosis. Density Estimation. Hypothesis Test. Quantile.

AB This paper considers the problem of choosing the number of bootstrap repetitions B for bootstrap standard errors, confidence intervals, and tests. For each of these problems, the paper provides a three-step method for choosing B to achieve a desired level of accuracy. Accuracy is measured by the percentage deviation of the bootstrap standard error estimate, confidence interval endpoint(s), test's critical value, or test's p -value based on B bootstrap simulations from the corresponding ideal bootstrap quantities for which $B = \infty$. Monte Carlo simulations show that the proposed methods work quite well. The results apply quite generally to parametric, semiparametric, and nonparametric models with independent and dependent data. The results apply to the standard nonparametric iid bootstrap, moving block bootstraps for time series data, parametric and semiparametric bootstraps, and bootstraps for regression models based on bootstrapping residuals.

PD August 1997. **TI** A Simple Counterexample to the Bootstrap. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1157; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 8. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** C10. **KW** Bootstrap. Boundary. Confidence Interval. Asymptotic Coverage. Estimation.

AB The bootstrap of the maximum likelihood estimator of the mean of a sample of iid normal random variables with mean μ and variance one is not asymptotically correct to first order when the mean is restricted to be nonnegative. The problem occurs when the true value of the mean μ equals zero. This counterexample to the bootstrap generalizes to a wide variety of estimation problems in which the true parameter may be on the boundary of the parameter space. The author provides some alternatives to the bootstrap that are asymptotically correct to first order. The author considers two types of bootstrap percentile confidence intervals in the above example. It is found that they both have asymptotic coverage probability that exceeds the nominal asymptotic level when the true value of the mean μ equals zero.

PD November 1997. **TI** Consistent Moment Selection Procedures for Generalized Method of Moments Estimation. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1146R; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 21. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** C12, C13, C52. **KW** Downward Testing. GMM Estimator. Instrumental Variables. Model Selection. Moment Selection.

AB This paper considers a generalized method of moments (GMM) estimation problem in which one has a vector of moment conditions, some of which are correct and some incorrect. The paper introduces several procedures for consistently selecting the correct moment conditions. The procedures also can consistently determine whether there is a sufficient number of correct moment conditions to identify the unknown parameters of interest. The paper specifies moment selection criteria that are GMM analogues of the widely used

BIC and AIC model selection criteria. The paper also considers downward and upward testing procedures. All of the moment selection procedures discussed in the paper are based on the minimized values of the GMM criterion function for different vectors of moment conditions. The procedures are applicable in time series and cross-sectional contexts. Application of the results of the paper to instrumental variables estimation problems yields consistent procedures for selecting instrumental variables.

Angrist, Joshua D.

PD October 1996. **TI** The Effect of Teen Childbearing and Single Parenthood on Childhood Disabilities and Progress in School. **AU** Angrist, Joshua D.; Lavy, Victor. **AA** Angrist: Massachusetts Institute of Technology and National Bureau of Economic Research. Lavy: Hebrew University. **SR** National Bureau of Economic Research Working Paper: 5807; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 28. **PR** \$5.00. **JE** I20, J12, J13. **KW** Education. Health. Children. Maternal Age. Single Parent.

AB Teen and out-of-wedlock child-bearing are often thought to be responsible for poor health and low levels of schooling among the children of young mothers. This paper uses special disability and grade repetition questions from the school enrollment supplement to the 1992 Current Population Survey to estimate the effect of maternal age and single parenthood on children's disability status and school progress. The authors' results suggest that there is little association between maternal age at birth and children's disabilities. But the children of teen mothers are much more likely to repeat one or more grades than other children, and within-household estimates of this relationship are even larger than OLS estimates. Having a father in the household is associated with lower disability prevalence and fewer grade repetitions. But many of the effects of single parenthood on disability appear to be explained by higher incomes in two-parent families.

PD January 1997. **TI** Using Maimonides' Rule to Estimate the Effect of Class Size on Scholastic Achievement. **AU** Angrist, Joshua D.; Lavy, Victor. **AA** Angrist: Massachusetts Institute of Technology and National Bureau of Economic Research. Lavy: Hebrew University. **SR** National Bureau of Economic Research Working Paper: 5888; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 28. **PR** \$5.00. **JE** I21, J24. **KW** Labor Studies. Education. Class Size. Human Capital. Israel.

AB In Israeli public schools today, class size is partly determined using a rule proposed by Maimonides in the 12th century. This rule induces a nonlinear and non-monotonic relationship between enrollment size and class size. The authors use this relationship to construct instrumental variables estimates of the effect of class size on the test scores of Israeli 4th and 5th graders in 1991 and 3rd graders in 1992. The authors use of Maimonides' rule can be viewed as an application of Campbell's (1969) regression-discontinuity design to the class size question. The results of this application show that reductions in class size induce a significant and substantial increase in reading and math scores for 5th graders and a smaller increase in reading scores for 4th graders. The estimates also suggest that the gains from small classes are largest for students from disadvantaged backgrounds.

Arentze, Bierlaire, M. T.

TI Investigating Consumers' Tendency to Combine Multiple Shopping Purposes and Destinations. **AU** Dellaert, B. G. C.; Arentze, Bierlaire, M. T.; Borgers, A.; Timmermans, H.

Argimon, Isabel

PD November 1997. **TI** Empresa Publica y Empresa Privada: Titularidad y Eficiencia Relativa. **AU** Argimon, Isabel; Artola, Concha; Gonzalez Paramo, Jose Manuel. **AA** Banco de Espana. **SR** Banco de Espana. Servicio de Estudios. Documento de Trabajo: 9723; Banco de Espana. Seccion de Publicaciones. Negociado de Distribucion y Gestion. Alcala 50. 28104 Madrid. Website: www.bde.es. **PG** 18. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** L33. **KW** Productive Efficiency. Public Firms.

AB This paper compares the performance of public and private firms in Spain, with the aim of isolating the relationship between ownership and productive efficiency. Using the Banco de Espana Central Balance Sheet data for 1994, we construct an efficiency index, based on labor productivity, to analyze the impact of public ownership. The evidence shows that the average efficiency of firms where public ownership is above 50% is inferior to that of the rest of firms.

Artola, Concha

TI Empresa Publica y Empresa Privada: Titularidad y Eficiencia Relativa. **AU** Argimon, Isabel; Artola, Concha; Gonzalez Paramo, Jose Manuel.

Asdrubali, Pierfederico

TI How do Countries Smooth Regional Disturbances? Risksharing in Spain: 1973-1993. **AU** Alberola, Enrique; Asdrubali, Pierfederico.

Ashayeri, J.

PD March 1997. **TI** Applications of P-Median Techniques to Facilities Design Problems: An Improved Heuristic. **AU** Ashayeri, J.; Heuts, R.; Tammel, B. **AA** Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9733; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 29. **PR** no charge. **JE** S70. **KW** Facilities Design. Clustering. Heuristic Approach.

AB Facilities design is closely related to efficient use of available resources. This paper presents a heuristic approach to solve two core problems of a good facilities design: facility location and facility layout. The latter group of problems will be solved for warehouse and production systems in particular. All these problems can be formulated as so-called p-median clustering problems. Teitz and Bart developed the vertex substitution method to solve those problems. This paper introduces effective improvements on this heuristic. The approach is tested on a large number of randomly generated cases and on problems taken from the literature. The results demonstrate the effectiveness and superiority of our method.

Ashenfelter, Orley

PD January 1998. **TI** Identifying the Firm-Specific Cost Pass-Through Rate. **AU** Ashenfelter, Orley; Ashmore, David; Baker, Jonathon B.; McKernan, Signe-Mary.

AA Ashenfelter: Princeton University. Ashmore: Ashenfelter and Ashmore. Baker and McKernan: Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 217; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave., NW, Room 3110, Washington, D.C. 20580. Website: bperson@ftc.gov. **PG** 21. **PR** no charge. **JE** C51, G34, L11, L49, L81. **KW** Cost Pass-Through. Merger Analysis.

AB A merger that permits the combined company to reduce the marginal cost of producing a product creates an incentive for it to lower price. Accordingly, the rate at which cost changes are passed through to prices matters to the evaluation of the likely competitive effects of an acquisition. In this paper, the authors describe their empirical methodology for estimating the cost pass-through rate facing an individual firm, and for distinguishing that rate from the rate at which a firm passes through cost changes common to all firms in an industry. They apply this methodology to determine the firm-specific pass-through rate for Staples, an office superstore chain, and find that this firm historically passed-through firm-specific cost changes at a rate of 15% (i.e., it lowered price on an average by 0.15% in response to a 1% decrease in marginal cost).

Ashmore, David

TI Identifying the Firm-Specific Cost Pass-Through Rate. **AU** Ashenfelter, Orley; Ashmore, David; Baker, Jonathon B.; McKernan, Signe-Mary.

Athanasoulis, Stefano

PD June 1997. **TI** The Significance of the Market Portfolio. **AU** Athanasoulis, Stefano; Shiller, Robert J. **AA** Athanasoulis: Iowa State University. Shiller: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1154; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 29. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** G11. **KW** Derivatives. Futures. CAPM. Income Risk. Incomplete Markets.

AB The market portfolio is in one sense a least important portfolio to provide to investors; there is always a better portfolio for social planners to make available. In a J-agent one-period stochastic endowment economy, the market portfolio is never spanned by the optimal markets a social planner would create. With identical preferences, the market portfolio is orthogonal to all J-1 portfolios which achieve a first best solution. These conclusions rely on the assumption that the social planner has perfect information about agents' utilities. It is also shown that as the contract designer's information about agents' utilities becomes more imperfect, the optimal contracts approach contracts that weigh individual endowments in proportion to elements of eigenvectors of the variance matrix of endowments. If there is a substantial market component to endowments then a social planner may conclude that creating a contract to allow trading the market portfolio would be a significant innovation.

Autor, David H.

PD March 1997. **TI** Computing Equality: Have Computers Changed the Labor Market. **AU** Autor, David H.; Katz, Lawrence F.; Krueger, Alan B. **AA** Autor: Harvard University. Katz: Harvard University and National Bureau of Economic Research. Krueger: Princeton University and National Bureau of Economic Research. **SR** Princeton

Industrial Relations Section Working Paper: 377; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 58. **PR** \$2.00. **JE** J23, J24, J31. **KW** Skill Demands. Wage Differentials. Technology.

AB This paper examines the effect of technological change and other factors on the relative demand for workers with different education levels and on the recent growth of U.S. educational wage differentials. A simple supply-demand framework is used to interpret changes in the relative quantities, wages, and wage bill shares of workers by education in the aggregate U.S. labor market in each decade since 1940 and over the 1990 to 1995 period. The acceleration in demand shifts for more-skilled workers in the 1970's and 1980's relative to the 1960's is entirely accounted for by an increase in within-industry changes in skill utilization rather than between-industry employment shifts. Industries with large increases in the rate of skill upgrading in the 1970's and 1980's versus the 1960's are those with greater growth in employee computer usage, more computer capital per worker, and larger shares of computer investment as a share of total investment.

Ayuso, Juan

PD June 1997. **TI** Are Ex-post Real Interest Rates a Good Proxy for Ex-Ante Real Rates: An International Comparison Within a CCAPM Framework. **AU** Ayuso, Juan; Lopez-Salido, J. David. **AA** Banco de Espana. **SR** Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9710; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcalá 50, 28104 Madrid. Website: www.bde.es. **PG** 18. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** G12. **KW** Asset Pricing. Interest Rates. Inflation Expectations.

AB An integrated framework based on the CCAPM is used to jointly estimate ex-ante real interest rates, (bounds on) inflation risk premia and (bounds on) agents' inflation expectation errors in four countries - France, Spain, UK and U.S. -- under three different preference specifications. According to our results, 1-year ex-ante real interest rates exhibit a rather low correlation with the 1-year ex-post rate. For those ex-ante real rates showing the highest correlation with the ex-post real rates, the difference between both real rates seems to be mainly explained in terms of agents' inflation expectation errors, while the inflation premia play a minor role.

TI When May Peseta Depreciations Fuel Inflation? **AU** Alberola, Enrique; Ayuso, Juan; Lopez-Salido, J. David.

Ayuso-Huertas, Juan

TI El Poder Predictivo de los Tipos de Interés Sobre la Tasa de Inflación Española. **AU** Alonso-Sanchez, Francisco; Ayuso-Huertas, Juan; Martínez-Pages, Jorge.

Baicker, Katherine

PD January 1997. **TI** A Distinctive System: Origins and Impact of US Unemployment Compensation. **AU** Baicker, Katherine; Goldin, Claudia; Katz, Lawrence F. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5889; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 34. **PR** \$5.00. **JE** H71, J65, N30. **KW** Labor Studies. Unemployment. Economic History.

Seasonality.

AB Unemployment compensation in the United States was signed into law in August 1935 as part of the omnibus Social Security Act. The portions that dealt with unemployment were crafted to achieve a multiplicity of goals, among them passage of the act and a guarantee of its constitutionality. Along with the federal-state structure went experience-rating and characteristics added by the states, such as the limitation on duration of benefits. The authors contend that these features were products of the times, reflecting expediency more than efficiency, and thus that UI would have been different had it been passed in another decade. The authors present evidence showing that more seasonality in manufacturing unemployment in 1909-29 is related to higher UI benefits from 1947 to 1969, if a state's manufacturing employment share is below the national mean. Lobbying activities of seasonal industries appear more important in the evolution of the parameters.

Baker, Jonathon B.

TI Identifying the Firm-Specific Cost Pass-Through Rate. **AU** Ashenfelter, Orley; Ashmore, David; Baker, Jonathon B.; McKernan, Signe-Mary.

TI Identifying the Firm-Specific Cost Pass-Through Rate. **AU** Ashenfelter, Orley; Ashmore, David; Baker, Jonathon B.; McKernan, Signe-Mary.

Banerjee, Anurag N.

PD July 1997. **TI** On the Sensitivity of the Usual T-and F-Tests to AR(1) Misspecification. **AU** Banerjee, Anurag N.; Magnus, Jan R. **AA** Center for Economic Research and Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9790; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 48. **PR** no charge. **JE** not available. **KW** Linear Regression. Least Squares. T-Test. F-Test. Autocorrelation. Sensitivity. Robustness.

AB We consider the standard linear regression model with all standard assumptions, except that the disturbances are not white noise. Our interest lies in testing linear restrictions using the usual F-statistic based on OLS residuals. The estimate of θ might be significantly different from zero, but we are interested in the effect on the test statistic itself. We propose a sensitivity statistic for this purpose, study its properties, and propose a practical and easy-to-use decision rule to decide whether the F-test is sensitive or not to covariance misspecification when θ is close to zero. When θ is not close to zero, we find that the F-test (t-test) is quite sensitive to θ , but that the decision to accept the null hypothesis is a robust decision.

PD October 1997. **TI** Sensitivity of Univariate AR(1) Time-Series Forecasts Near the Unit Root. **AA** Center for Economic Research and Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9788; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 30. **PR** no charge. **JE** C13, C20, C22, C53. **KW** Sensitivity. Time-Series. Unit Root. Forecast.

AB We consider the linear time-series model $y(\text{sub } t) = d(\text{sub } t) + u(\text{sub } t)$ ($t = 1, \dots, n$), where $d(\text{sub } t)$ is the deterministic trend

and $u(\text{sub } t)$ the stochastic term which follows an AR(1) process $u(\text{sub } t) = (\theta)u(\text{sub } t-1) + e(\text{sub } t)$ with normal innovations $e(\text{sub } t)$. Various assumptions about the start-up will be made. Our main interest lies in the behavior of the 1-period ahead forecast $\hat{y}(\text{sub } n+1)$ near $\theta = 1$. Unlike in other studies of AR(1) unit root processes, we do not ask the question whether $\theta = 1$ or not. Instead we ask what happens to the forecast estimate near and at $\theta = 1$. For this purpose we define the first and second order sensitivity measure of the forecast $\hat{y}(\text{sub } n+1)$ near $\theta = 1$. This measures the sensitivity of the forecast at the unit root. We consider two deterministic trends: $d(\text{sub } t) = \beta(\text{sub } 1)$ and $d(\text{sub } t) = \beta(\text{sub } 1) + \beta(\text{sub } 2)(t)$. The forecast will be the Best Linear Unbiased forecast. We show that, when $d(\text{sub } t) = \beta(\text{sub } 1)$, the number of observations has no effect on forecast sensitivity. When the deterministic trend is linear, the sensitivity is zero. We also develop a large sample procedure to measure the forecast sensitivity when we are uncertain whether or not to include the linear trend.

Barr, David G.

PD November 1996. **TI** Inflation, Real Interest Rates, and the Bond Market: A Study of UK Nominal and Index-Linked Government Bond Prices. **AU** Barr, David G.; Campbell, John Y. **AA** Barr: Brunel University. Campbell: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5821; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** \$5.00. **JE** E31, E37, E43, E47, G10. **KW** Inflation. Price Level. Interest Rates. Bonds. United Kingdom.

AB This paper estimates expected future real interest rates and inflation rates from observed prices of UK government nominal and index-linked bonds. The estimation method takes account of imperfections in the indexation of UK index-linked bonds. It assumes that expected log returns on all bonds are equal, and that expected real interest rates and inflation follow simple time-series processes whose parameters can be estimated from the cross-section of bond prices. The extracted inflation expectations forecast actual future inflation more accurately than nominal yields do. The estimated real interest rate is highly variable at short horizons, but comparatively stable at long horizons. Changes in real interest rates and expected inflation are strongly negatively correlated at short horizons, but not at long horizons.

Bartov, Eli

PD May 1997. **TI** Stock Price Behavior Around Announcements of Write-Offs. **AU** Bartov, Eli; Lindahl, Frederick W.; Ricks, William E. **AA** Bartov: New York University. Lindahl: George Washington University. Ricks: Rosenberg Institutional Equity Management. **SR** New York University, Salomon Center Working Papers: S/97/20; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 32. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** G12, G14, G30. **KW** Write-Offs. Asset Write-Downs. Operating Decisions. Restructuring. Market Efficiency.

AB Is it plausible that important corporate events such as write-offs, amounting to around 20% of a firm's market value on average, are associated with a stock-price response of less

than 1%? Previous event studies have found such small responses. The authors first perform an event study, in part to insure that their sample replicates prior findings, and secondly to explore possible differences in the broad category of "write-offs." They do find a small announcement effect, but they also find there are differences. Write-offs in connection with operating changes differ significantly from write-offs that reflect merely write-downs of asset book values. The authors explain the difference between small event date effects and large write-offs by observing a lengthy period before and after. They find that price declines precede write-off announcements. A new finding is that abnormal returns continue to decline after the announcements by as much as 17% for one-year.

PD August 1997. **TI** Information, Transaction Costs, and Patterns in Stock Returns After Earnings Announcements. **AU** Bartov, Eli; Krinsky, Itzhak; Radhakrishnan, Suresh. **AA** Bartov and Radhakrishnan: New York University. Krinsky: McMaster University. **SR** New York University, Salomon Center Working Papers: S/97/18; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 33. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** G12, G14, M41. **KW** Anomalies. Market Efficiency. Institutional Investor. Transaction Costs.

AB This study tests two potential explanations for the observed patterns in stock returns after earnings announcements: information inefficiency and transaction costs. The results (weakly) confirm findings in prior work that proxies for transaction costs (i.e., trading volume and stock price), and firm size are important in explaining this phenomenon. The authors' main findings, however, demonstrate that the incremental explanatory power of the informational inefficiency variable (i.e., institutional investor holdings) is above and beyond transaction costs and firm size. One way to interpret these findings is that investors miss trading opportunities arising from public disclosures (i.e., quarterly earnings announcements) for which expected profits from trading exceed transaction costs. Thus, the predictability of stock returns after earnings announcements represents a form of mispricing that is inconsistent with the view of informationally efficient capital markets.

PD September 1997. **TI** Determinants of Alternative Corporate Payout Mechanisms: Cash- Dividend Increases and Open-Market-Repurchase Initiations. **AU** Bartov, Eli; Krinsky, Itzhak; Lee, Jason. **AA** Bartov: New York University. Krinsky and Lee: McMaster University. **SR** New York University, Salomon Center, Working Papers: S/97/19; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 25. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** G35. **KW** Dividends. Stock Repurchases. Payout Policy.

AB What determines the observed mechanism of corporate cash distributions to shareholders? The authors first identify and then test three important factors for the choice between increasing cash dividends and initiating open-market stock repurchases, the two most common mechanisms for distributing excess cash to shareholders. More specifically, the authors argue that firms are more likely to distribute cash to investors through open-market repurchases than through dividend increases if: (1) their stock is undervalued, (2) management

compensation packages include stock options, and (3) they are held by institutional investors. Results from both univariate tests and multiple-regression logit analyses support these predictions.

Basu, Susanto

PD December 1996. **TI** Appropriate Technology and Growth. **AU** Basu, Susanto; Weil, David N. **AA** Basu: University of Michigan and National Bureau of Economic Research. Weil: Brown University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5865; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 21. **PR** \$5.00. **JE** O14, O30, O40. **KW** Economic Fluctuations. Growth. Technology. **AB** The authors present a model of growth and technology transfer based on the idea that technologies are specific to particular combinations of inputs. They argue that this model is more realistic than the usual specification, in which an improvement in any technique for producing a given good improves all other techniques for producing that good. Their model implies that technology improvements will diffuse only slowly, even if there are no barriers to the flow of knowledge and no adoption costs. On the other hand, although their basic production technology is of the "AK" variety, technology diffusion implies that countries with identical policies and different initial incomes do eventually converge to the same level of per-capita income. The authors argue that a model with appropriate technology and technology diffusion is more appealing and has more realistic predictions for long-run convergence and growth, than either the standard neoclassical model or endogenous-growth models.

PD October 1997. **TI** Aggregate Productivity and Aggregate Technology. **AU** Basu, Susanto; Fernald, John G. **AA** Basu: University of Michigan. Fernald: Federal Reserve Board. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 593; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us. **PG** 55. **PR** no charge. **JE** D24, E23. **KW** Productivity. Technology. Aggregation. Welfare.

AB Aggregate productivity and aggregate technology are meaningful but distinct concepts. We show that a slightly-modified Solow productivity residual measures changes in economic welfare, even when productivity and technology differ because of distortions such as imperfect competition. We then present a general accounting framework that identifies several new non-technological gaps between productivity and technology, gaps reflecting imperfections and frictions in output and factor markets. Empirically, we find that these gaps are important, even though we abstract from variations in factor utilization and estimate only small average sectoral markups. Compared with productivity growth, our measured technology shocks are significantly less correlated with output, and are essentially uncorrelated with inputs. Our results imply that calibrating dynamic general equilibrium models as if Solow residuals were technology shocks confuses impulses and propagation mechanisms.

Bates, David S.

PD January 1997. **TI** Post-'87 Crash fears in S&P 500 Futures Options. **AA** University of Iowa and National

Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5894; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 54. **PR** \$5.00. **JE** G12, G13. **KW** Asset Pricing. Options Pricing. Jump Diffusion. Stochastic Volatility.

AB This paper shows that post-crash implicit distributions have been strongly negatively skewed, and examines two competing explanations: stochastic volatility models with negative correlations between market levels and volatilities, and negative-mean jump models with time-varying jump frequencies. The two models are tested using a Fourier inversion European option pricing methodology, and fitted to S&P 500 futures options data over 1988-1993 using a nonlinear generalized least squares/Kalman filtration methodology. While volatility and level shocks are substantially negatively correlated, the stochastic volatility model can explain the implicit negative skewness only under extreme parameters (e.g., high volatility of volatility) that are implausible given the time series properties of option prices. By contrast, the stochastic volatility/jump-diffusion model generates substantially more plausible parameter estimates. Evidence is also presented against the hypothesis that volatility follows a diffusion.

Battalio, Raymond

PD November 1997. **TI** Risk Dominance, Payoff Dominance and Probabilistic Choice Learning. **AU** Battalio, Raymond; Samuelson, Larry; Van Huyck, John. **AA** Battalio and Van Huyck: Texas A&M University. Samuelson: University of Wisconsin. **SR** University of Wisconsin -- Madison, Social Systems Research Institute Working Paper Series: 9802; Social Systems Research Institute, University of Wisconsin -- Madison, 1180 Observatory Drive, Room 6470, Madison, Wisconsin 53706. Website: www.ssc.wisc.edu/econ/achive. **PG** 22. **PR** first 3 papers per year are free; thereafter, \$6.00 for Canada, U.S., and Mexico; \$8.00 for international; \$60 for Canada, U.S., and Mexico or \$80 international for yearly subscriptions. **JE** C72, C78, C92, D83. **KW** Probabilistic Choice. Fictitious Play. Bounded Rationality. Random Utility. Logistic Response.

AB This paper reports an experiment comparing three stag hunt games that have the same best-response correspondence. The games have the same expected payoff from the mixed equilibrium, but differ in the pecuniary incentive a player has to play a best response to other mixtures. In each game, risk dominance conflicts with payoff dominance and selects an efficient pure strategy equilibrium. The authors find statistically and economically significant evidence that the expected earnings difference helps explain observed behavior.

Beetsma, Roel M. W. J.

PD June 1997. **TI** An Analysis of the "Stability Pact". **AU** Beetsma, Roel M. W. J.; Uhlig, Harald. **AA** Beetsma: University of British Columbia, Maastricht University and Center for Economic Policy Research. Uhlig: Tilburg University and Center for Economic Policy Research. **SR** Tilburg Center for Economic Research Discussion Paper: 9759; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 26. **PR** no charge. **JE** E58, E61, E63, F33, F42,

H63. **KW** Stability Pact. European Monetary Union. Political Distortions. Monetary Policy. Inflation.

AB We analyze the proposed "Stability Pact" for countries joining a European Monetary Union (EMU). In an EMU, shortsighted governments fail to fully internalize the inflationary consequences of their debt policies. This results in excessive debt accumulation. Therefore, while in the absence of EMU governments have no incentive to sign a stability pact, under an EMU they prefer a stability pact which punishes excessive debt accumulation. With idiosyncratic shocks to the governments' budgets, an EMU combined with an appropriately designed stability pact will be strictly preferred to autonomy. While the stability pact corrects the average debt bias, inflation, which is attuned to the union-average debt level, is more stable.

TI When to Fire Bad Managers: The Role of Collusion Between Management and Board of Directors. **AU** Rebers, Eugene; Beetsma, Roel M. W. J.; Peters, Hans.

Begg, David K.

PD December 1997. **TI** Options for the Future Exchange Rate Policy of the EMU. **AU** Begg, David K.; Giavazzi, Francesco; Wyplosz, Charles. **AA** Begg: Birkbeck College and Center for Economic Policy Research. Giavazzi: Universita Bocconi and Center for Economic Policy Research. Wyplosz: Graduate Institute of International Studies and Center for Economic Policy Research. **SR** Centre for Economic Policy Research Occasional Paper: 17; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LP England. **PG** 30. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** E63, F31, F33, F36. **KW** Exchange Rates. European Union. Fiscal Policy. Monetary Policy. Policy Mix.

AB Although the title only refers to the "Exchange Rate Policy" of the EMU, this paper covers a broader set of issues: in particular it analyses in some detail the monetary and fiscal stance of the EMU. This is because a region's exchange rate is the outcome of that region's policy mix, and cannot be analyzed independently of the mix of monetary and fiscal policy that the region's authorities implement. In this sense there is no such thing as an exchange rate per se. An inappropriate exchange rate is often the result of an inappropriate policy mix, and can only be corrected by changing the particular policy mix. Policy decisions regarding the exchange rate do arise, in connection with the choice of the exchange rate regime (fix or flexible exchange rate, or target zones, etc.), or when analyzing exchange market intervention, or the international role of currency.

Bekaert, Geert

PD December 1996. **TI** The Implications of First-Order Risk Aversion for Asset Market Risk Premiums. **AU** Bekaert, Geert; Hodrick, Robert J.; Marshall, David A. **AA** Bekaert: Stanford University and National Bureau of Economic Research. Hodrick: Columbia University and National Bureau of Economic Research. Marshall: Federal Reserve Bank of Chicago. **SR** Tilburg Center for Economic Research Discussion Paper: 9707; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 50. **PR** no charge. **JE** E44, G12, G15. **KW** Risk Aversion. Asset Prices. Exchange Rates. General Equilibrium.

AB In an effort to explain simultaneously the excess return predictability observed in equity, bond, and foreign exchange markets, we incorporate preferences exhibiting first-order risk aversion into a general equilibrium two-country monetary model. When we calibrate the model to U.S. and Japanese data, we find that first-order risk aversion substantially increases excess return predictability. However, this increased predictability is insufficient to match the data. We conclude that the observed patterns of excess return predictability are unlikely to be explained purely by time-varying risk premiums generated by high risk averse agents in a complete markets economy.

PD March 1997. **TI** Target Zones and Exchange Rates: An Empirical Investigation. **AU** Bekaert, Geert; Gray, Stephen F. **AA** Bekaert: Stanford University and National Bureau of Economic Research. Gray: University of Queensland and Duke University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9722; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 60. **PR** no charge. **JE** F31, F33. **KW** Exchange Rates. Target Zones. European Monetary System.

AB This paper develops an empirical model of exchange rates in a target zone. The distribution of exchange rate changes is conditioned on a latent jump variable where the probability and size of a jump vary over time as a function of financial and macroeconomic variables. When there is no jump, the target zone is credible and exchange rate changes are constrained to remain within the target zone band. The paper revisits the empirical evidence from the European Monetary System regarding the conditional distribution of exchange rate changes, the credibility of the system, and the size of the foreign exchange risk premia. In contrast to some previous findings, we conclude that the French Franc/Deutschemark rate exhibits considerable nonlinearities, realignments are somewhat predictable, and the credibility of the system did not increase substantially after 1987. Moreover, our model implies that the foreign exchange risk premium becomes large during speculative crises.

Belke, Ansgar

PD November 1997. **TI** Estimating the Costs and Benefits of EMU: The Impact of External Shocks on Labor Markets. **AU** Belke, Ansgar; Gros, Daniel. **AA** Belke: Ruhr Universitat Bochum. Gros: Centre for European Policy Studies. **SR** Tilburg CentER for Economic Research Discussion Paper: 9795; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 55. **PR** no charge. **JE** E24, E52, F41. **KW** Exchange Rates. Export Demand. External Shocks. Optimal Currency Area. Employment.

AB Discussions of the economic costs and benefits of EMU usually take as their basis the optimum currency area (OCA) approach. This approach starts from the premise that when an external shock hits the economy, it is easier to adjust the exchange rate than domestic prices or wages. Most economists accept the general idea behind this approach, namely that nominal wages are usually sticky in the short-run and that it is therefore easier to adjust to external shocks and obtain changes in the real exchange rate or the terms of trade

through a movement in the exchange rate. But there is little agreement on how important these external shocks are in reality. We try to measure the importance of external shocks for (un)employment. We find that external shocks have little impact on unemployment, but are more important in the evolution of employment in manufacturing. The results differ, however, strongly from country to country and for about half of EU member countries we did not find any significant relationship. Taking into account various potential shock absorbers (exchange rate movements, fiscal and monetary policy) does not affect the results. We conclude that the loss of the exchange rate instrument will not lead to massive unemployment problems.

Bell, Una-Louise

PD November 1997. **TI** A Comparative Analysis of the Aggregate Matching Process in France, Great Britain and Spain. **AA** International Centre for Economic Research (ICER). **SR** Banco de Espana. Servicio de Estudios. Documento de Trabajo: 9721; Banco de Espana. Seccion de Publicaciones. Negociado de Distribucion y Gestion. Alcala 50. 28104 Madrid. Website: www.bde.es. **PG** 21. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** J64. **KW** Matching Function.

AB Recent research on unemployment has emphasized the need to further our understanding of labor market dynamics. A key feature of many theories is that the matching mechanism between workers and jobs can be analyzed from an aggregate perspective and approximated by a simple matching function. On the basis of somewhat limited empirical work, this function appears to be best approximated by a constant returns to scale Cobb-Douglas function, relating the flow of new hires to the stock of unemployment and vacancies. This paper provides a comparative analysis of the matching process in France, Great Britain and Spain, adopting a more systematic approach and using a more reliable data set. In contrast to existing work in this area, we do not find overwhelming evidence for constant returns to scale in the matching technology. The matching function appears to exhibit increasing returns in both Great Britain and Spain and decreasing returns in France. Perhaps more importantly, a number of our results tend to draw into question the appropriateness of the standard specification within a European context.

Bentolila, Samuel

PD October 1997. **TI** La Inmovilidad del Trabajo en las Regiones Espanolas. **AA** Centro de Estudios Monetarios y Financieros (CEMFI). **SR** Banco de Espana. Servicio de Estudios. Documento de Trabajo: 9718; Banco de Espana. Seccion de Publicaciones. Negociado de Distribucion y Gestion. Alcala 50. 28104 Madrid. Website: www.bde.es. **PG** 15. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** J61, R23. **KW** Regional Migration. Unemployment. Spain.

AB Migration between Spanish regions has significantly fallen since the beginning of the seventies, despite the large and growing unemployment rate differences between them. This article argues that this evolution is the result of the big increase in the national unemployment rate; the reduction of the regional dispersion in other economic variables, partly due to important institutional changes since 1975; and the rise of

migration flows from richer to poorer regions, i.e. a reverse migration.

Berger, Allen N.

PD March 1997. **TI** The Effects of Bank Mergers and Acquisitions on Small Business Lending. **AU** Berger, Allen N.; Saunders, Anthony; Scalise, Joseph M.; Udell, Gregory F. **AA** Berger: Federal Reserve System and Wharton Financial Institutions Center. Saunders: and Udell: New York University. Scalise: Wharton Financial Institutions Center. **SR** New York University, Salomon Center Working Papers: S/97/06; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 30. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** G21, G34. **KW** Banks. Mergers and Acquisitions. Lending.

AB The authors examine the effects of bank M&A's on small business lending. The authors' methodology permits empirical analysis of the vast majority of U.S. bank M&A's since the late 1970's -- over 6,000 M&A's involving over 10,000 banks (some active banks are counted multiple times). They are the first to decompose the impact of M&A's on small business lending into static effects associated with a simple melding of the antecedent institutions and dynamic effects associated with post-M&A refocusing of the consolidated institution. The authors are also the first to estimate the reactions of other banks in local markets to M&A's. They find that the static effects of consolidation which reduce small business lending are mostly offset by the reactions of other banks in the market, and in some cases also by refocusing efforts of the consolidating institutions themselves.

Berger, Philip G.

PD August 1997. **TI** Causes and Effects of Corporate Refocusing Programs. **AU** Berger, Philip G.; Ofek, Eli. **AA** Berger: University of Pennsylvania. Ofek: New York University. **SR** New York University, Salomon Center Working Papers: S/97/23; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 28. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** G31, G34, L22. **KW** Corporate Refocusing. Diversified Firms. Divestitures.

AB The authors study the precursors and outcomes of refocusing episodes by diversified firms that were not taken over. Those that refocus have more value-reducing diversification policies than those not refocusing. Major disciplinary or incentive-altering events (including management turnover, outside shareholder pressure, changes in management compensation, and financial distress) usually must occur, however, before managers refocus. Consistent with divestitures reversing, at least in part, value destruction from unsuccessful diversification strategies, the cumulative abnormal returns over a firm's refocusing-related announcements average 7.3%, and are significantly related to the amount of value-reduction associated with the refocuser's diversification policy.

Berliant, Marcus

PD March 1995. **TI** Optimal Budget Balancing Income Tax Mechanisms and the Provision of Public Goods. **AU** Berliant, Marcus; Page Jr., Frank H. **AA** Berliant:

Washington University. Page: University of Alabama. **SR** Tilburg Center for Economic Research Discussion Paper: 9729; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 37. **PR** no charge. **JE** H20, H41, H61. **KW** Income Tax. Public Goods. Budget Balancing.

AB In this paper we establish necessary and sufficient conditions for the simultaneous existence of an optimal income tax mechanism and an optimal vector of public goods. Moreover, we identify a condition sufficient to guarantee the optimal mechanism is budget balancing. The key ingredient in our analysis is a result characterizing incentive compatible income tax/public goods mechanism. This result allows us to convert the tax design/public goods problem with financing and incentive compatibility constraints to an equivalent design problem without incentive compatibility constraints. Our characterization of incentive compatibility requires only very weak assumptions concerning agents' utility functions and does not rely in any way on the problematic first order approach. Thus, gaps and bunching are permitted. While much of the literature restricts optimal taxes to be in certain classes of functions, our only restriction on the class of income tax functions is measurability.

PD August 1997. **TI** Increasing Returns and Perfect Competition: The Role of the Land. **AU** Berliant, Marcus; ten Raa, Thijs. **AA** Berliant: Washington University. ten Raa: Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9775; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 40. **PR** no charge. **JE** R13. **KW** Increasing Returns. Perfect Competition. Land.

AB The classical inconsistency between increasing returns and perfect competition is addressed. For example, if firms must pay a fixed cost of entry but then can produce using a constant returns to scale technology, they will generally operate at a loss, necessitating a government subsidy in order to attain an efficient allocation. Here we show that perfect competition and increasing returns can be consistent, in the sense that equilibria exist and are efficient without government intervention, provided that units of some input such as land can be identified and priced separately. The Alonso model with a finite number of agents is extended to include production under increasing returns, where all agents are mobile. The key is that producers use intervals of land, and the price they pay for land interior to the parcels can be adjusted to provide an implicit subsidy. Input price discrimination extends the sway of the free market to monopoly and monopsony. The relevance to the recent minimum wage debate is discussed.

Bernanke, Ben S.

PD January 1997. **TI** Inflation Targeting: A New Framework for Monetary Policy? **AU** Bernanke, Ben S.; Mishkin, Frederic S. **AA** Bernanke: Princeton University and National Bureau of Economic Research. Mishkin: Federal Reserve Bank of New York and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5893; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** E31, E32, E52, E58. **KW** Business Cycles. Growth. Monetary

Economics. Inflation Targeting. Central Banks.

AB In recent years a number of industrialized countries have adopted a strategy for monetary policy known as inflation targeting. The authors describe how this approach has been implemented in practice and argue that it is best understood as a broad framework for policy, which allows the central bank constrained discretion, rather than as an ironclad policy rule in the Friedman sense. The authors discuss the potential of the inflation targeting approach for making monetary policy more coherent and transparent, and for increasing monetary policy discipline. Their final section addresses some additional practical issues raised by this approach.

Berndt, Ernst R.

PD November 1996. **TI** Alternative Insurance Arrangements and the Treatment of Depression: What are the Facts? **AU** Berndt, Ernst R.; McGuire, Thomas G.; Frank, Richard G. **AA** Berndt: Massachusetts Institute of Technology and National Bureau of Economic Research. McGuire: Boston University. Frank: Harvard Medical School and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5813; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 20. **PR** \$5.00. **JE** G22, I12. **KW** Insurance. Depression. Health Care.

AB Using insurance claims data from nine large self-insured employers offering 26 alternative health benefit plans, we examine empirically how the composition and utilization for the treatment of depression vary under alternative organizational forms of insurance (indemnity, preferred provider organization networks or PPO's, and mental health carve-outs), and variations in patient cost-sharing (copayments for psychotherapy and for prescription drugs). Although total outpatient mental health/substance abuse (MHSA) expenditures per treated individual do not vary significantly across insurance forms, the depressed outpatient is more likely to receive antidepressant drug (ADD) medications in PPO's and carve-outs than under indemnity insurance. Those individuals facing higher copayments for psychotherapy are more likely to receive ADD medications. For those receiving ADD treatment, increases in prescription drug copay tends to increase the share of ADD medication costs accounted for by the newest (and more costly) generation of drugs, the selective serotonin reuptake inhibitors.

Bertola, Giuseppe

PD November 1996. **TI** Institutions and Labor Reallocation. **AU** Bertola, Giuseppe; Rogerson, Richard. **AA** Bertola: Università di Torino and National Bureau of Economic Research. Rogerson: University of Minnesota. **SR** National Bureau of Economic Research Working Paper: 5828; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 28. **PR** \$5.00. **JE** J31, J33, J63, J68. **KW** Employment. Job Creation. Europe. Wages.

AB Despite stringent dismissal restrictions in most European countries, rates of job creation and destruction are remarkably similar across European and North American labor markets. This paper shows that relative-wage compression is conducive to higher employer-initiated job turnover, and argues that wage setting institutions and job-security provisions differ across countries in ways that are both consistent with rough

uniformity of job turnover statistics and readily explained by intuitive theoretical considerations. When viewed as a component of the mix of institutional differences in Europe and North America, European dismissal restrictions are essential to a proper interpretation of both similar patterns in job turnover and marked differences in unemployment flows.

Bewley, Truman F.

PD November 1997. **TI** Why Not Cut Pay? **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1167; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 39. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** E24, J31, J50, J64. **KW** Wages. Rigidity. Unemployment.

AB Over 300 business people, labor leaders, business consultants, and counselors of unemployed people were interviewed during the recession of the early 1990's in order to learn why wages and salaries were declining in only a few firms. Employers believed that cutting pay would hurt employee morale, leading to lower productivity and current or future difficulties with hiring and retention. There were few indicators that unemployed people had excessive wage expectations. On the contrary, many unemployed were too flexible and found themselves rejected by firms as overqualified.

Bhaskar, V.

PD October 1997. **TI** Moral Hazard and Private Monitoring. **AU** Bhaskar, V.; van Damme, Eric. **AA** Bhaskar: University of St. Andrews. van Damme: CentER for Economic Research and Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9798; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 31. **PR** no charge. **JE** C73, D82, L15. **KW** Repeated Games. Imperfect Monitoring. Private Signals. Mixed Strategies. Sunspot Equilibria.

AB We analyze a model of repeated bilateral trade with moral hazard, where the quality of goods received can differ from the quality dispatched due to deterioration during transportation. Since the sender does not observe the quality of good received and the receiver does not observe the quality dispatched, we have a repeated game with imperfect monitoring by private signals. The stage game has multiple Nash equilibria, which would allow cooperation in finitely repeated interaction. However, with private signals, the pure strategy equilibria of the twice-repeated game are degenerate, and cannot support any cooperation. We construct a mixed strategy equilibrium which supports partial cooperation. However this mixed strategy equilibrium cannot approximate the cooperative outcome even if the noise in the signals tends to zero. This failure of lower hemicontinuity in the sequential equilibrium correspondence is removed if we allow for extensive form correlation; i.e. we allow players to condition their second period actions upon a sunspot as well as the private signals. We use the ideas to show how efficient outcomes can be supported in infinitely repeated one-sided moral hazard.

Blanchard, Olivier

PD November 1996. **TI** What We Know and Do Not Know About the Natural Rate of Unemployment.

AU Blanchard, Olivier; Katz, Lawrence F. **AA** Blanchard: Massachusetts Institute of Technology and National Bureau of Economic Research. Katz: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5822; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 37. **PR** \$5.00. **JE** E24, J31, J64, O30. **KW** Unemployment. Wages. Technological Change.

AB Over the past three decades, a large amount of research has attempted to identify the determinants of the natural rate of unemployment. It is this body of work that is assessed in this paper. The authors reach two main conclusions. First, there has been considerable theoretical progress over the past 30 years. A framework has emerged. This framework is presented, and it is shown how it can be used to think for example about the relation between technological progress and unemployment. Second, empirical knowledge lags behind. Economists do not have a good quantitative understanding of the determinants of the natural rate, either across time or across countries. The authors look at two issues, the relation of wages to unemployment, and the rise of European unemployment.

Bloemen, Hans G.

PD December 1996. **TI** Individual Wealth, Reservation Wages and Transitions Into Employment. **AU** Bloemen, Hans G.; Stancanelli, Elena G. F. **AA** Bloemen: CentER for Economic Research and Tilburg University. Stancanelli: Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9702; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 25. **PR** no charge. **JE** E21, J64. **KW** Unemployment. Savings.

AB In this paper we investigate the relationship between financial wealth, reservation wages and labor market transitions. According to the theory, higher levels of wealth will result in higher reservation wages and lower employment probabilities. We test for the validity of this assumption by estimating a simultaneous equations model of reservation wages, labor market transitions and wealth. The data used for the analysis relate to a sample of unemployed job searchers drawn from the Dutch Socio-Economic Panel. Wealth is found to have a significantly positive impact on the reservation wage. The overall impact of wealth on the employment probability is negative though small.

Blume, Andreas

PD June 1997. **TI** Fast Learning in Organizations. **AA** CentER for Economic Research, Tilburg University and University of Iowa. **SR** Tilburg CentER for Economic Research Discussion Paper: 9765; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 27. **PR** no charge. **JE** C72. **KW** Language. Optimal Learning. Common Knowledge. Group Theory.

AB This paper explores how efficiency structures language. It starts from the premise that one of language's central characteristics is to provide a means for saying novel things about novel circumstances, its creativity. As such it is a metaphor for the choice of organizational forms that can cope with a changing environment. It is shown how creative

language use is achieved via reliance on common knowledge structures, even if those structures are consistent with an a priori absence of a common language.

PD June 1997. **TI** Information Transmission and Preference Similarity. **AA** CentER for Economic Research, Tilburg University and University of Iowa. **SR** Tilburg CentER for Economic Research Discussion Paper: 9766; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 32. **PR** no charge. **JE** C72. **KW** Information Transmission. Equilibrium Selection. Focal Points. Incentive Alignment.

AB This paper proposes as a solution concept for games sets of Nash equilibria that are stable against replacement by alternative Nash equilibria. We prove existence, examine some variants that are related to evolutionary solution concepts, and, most importantly, offer a unified approach to predicting outcomes in sender-receiver games with imperfect incentive alignment. We strengthen predictions under partial common interest conditions as well as reject uninformative equilibria in Crawford and Sobel's parametric model of preference similarity.

Bodnar, Gordon M.

PD January 1997. **TI** The Valuation of the Foreign Income of US Multinational Firms: A Growth Opportunities Perspective. **AU** Bodnar, Gordon M.; Weintrop, Joseph. **AA** Bodnar: University of Pennsylvania and National Bureau of Economic Research. Weintrop: Baruch College. **SR** National Bureau of Economic Research Working Paper: 5904.; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** \$5.00. **JE** D92, F21, F23, G30, M40. **KW** International Finance. Multinational Firms. Foreign Earnings. Growth.

AB This paper demonstrates the value-relevance of foreign earnings for U.S. multinational firms by examining the associations between annual abnormal stock performance and changes in firms' domestic and foreign incomes disclosed through SEC Regulation 210.4-08(h). For 2570 firm-year observations between 1985 and 1993, both foreign and domestic earnings have significant positive associations with annual excess returns measures; however, the association coefficient on foreign income is significantly larger than the association coefficient on domestic income. This indicates that foreign earnings disclosures are value-relevant and suggests that firm value is more sensitive to foreign earnings than domestic earnings. The authors demonstrate that this larger foreign association coefficient is consistent with differences in growth opportunities between domestic and foreign operations. To further support the growth opportunity interpretation of the results, the authors demonstrate that larger foreign association coefficients are not due to the influence of exchange rate changes or the result of methodological problems.

Bond, Stephen

PD January 1997. **TI** Financial Factors and Investment in Belgium, France, Germany and the UK: A Comparison Using Company Panel Data. **AU** Bond, Stephen; Mairesse, Jacques; Elston, Julie; Mulkay, Benoit. **AA** Bond: Oxford University. Mairesse: INSEE and National Bureau of Economic Research. Elston: California Institute of Technology. Mulkay:

CEREGMIA. **SR** National Bureau of Economic Research Working Paper: 5900; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** C23, D21, E22, G31, L60. **KW** Productivity. Investment. Panel Data. Firm Behavior. Manufacturing Industry.

AB The authors construct company panel datasets for manufacturing firms in Belgium, France, Germany and the UK, covering the period 1978-89. These datasets are used to estimate a range of empirical investment equations, and to investigate the role played by financial factors in each country. A robust finding is that cash flow or profits terms appear to be both statistically and quantitatively more significant in the UK than in the three continental European countries. This is consistent with the suggestion that financial constraints on investment may be relatively severe in the more market-oriented UK financial system.

Bonin, John

PD August 1996. **TI** Towards Market-Oriented Banking in the Economics in Transition. **AU** Bonin, John; Wachtel, Paul. **AA** Bonin: Wesleyan University. Wachtel: New York University and Institute for EastWest Studies. **SR** New York University, Salomon Center Working Papers: S/97/02; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 29. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** Not available. **KW** Not available.

AB Not available.

Bordo, Michael D.

PD January 1997. **TI** Implications of the Great Depression for the Development of the International Monetary System. **AU** Bordo, Michael D.; Eichengreen, Barry. **AA** Bordo: Rutgers University and National Bureau of Economic Research. Eichengreen: University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5883; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 73. **PR** \$5.00. **JE** E42, F21, F33, N10. **KW** International Finance. Monetary Economics. Great Depression. Economic History.

AB In this paper the authors speculate about the evolution of the international monetary system in the last two-thirds of the twentieth century absent the Great Depression but present the major post-Depression political and economic upheavals. The authors argue that without the Depression the gold-exchange standard of the 1920's would have persisted until the outbreak of World War II. The Bretton Woods Conference would not have taken place, nor would a Bretton Woods System of pegged-but-adjustable exchange rates and restrictions on capital-account convertibility have been established. Instead, an unreformed gold-exchange standard of pegged exchange rates and unlimited international capital mobility would have been restored after World War II. But this gold-exchange standard would have collapsed even earlier than was actually the case with Bretton Woods. The move toward floating exchange rates that followed would have taken place well before 1971 in this counterfactual.

PD September 1997. **TI** Money, Sticky Wages, and the Great Depression. **AU** Bordo, Michael D.; Ercceg,

Christopher J.; Evans, Charles L. **AA** Bordo: Rutgers University and National Bureau of Economic Research. Ercceg: Federal Reserve Board. Evans: Federal Reserve Bank of Chicago. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 591; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us. **PG** 55. **PR** no charge. **JE** E31, J31. **KW** Dynamic General Equilibrium. Sticky Wages.

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 our 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, i.e., from 1929:3 through mid-1933. Our 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. Another finding casts doubt on explanations for the 1933-36 recovery that rely heavily on the substantial monetization that began in 1933.

Borgers, A.

TI Investigating Consumers' Tendency to Combine Multiple Shopping Purposes and Destinations. **AU** Dellaert, B. G. C.; Arentze, Bierlaire, M. T.; Borgers, A.; Timmermans, H.

Bound, John

PD November 1996. **TI** On the Validity of Season of Birth as an Instrument in Wage Equations: A Comment on Angrist and Krueger's "Does Compulsory School Attendance Affect Schooling and Earnings?" **AU** Bound, John; Jaeger, David A. **AA** Bound: University of Michigan and National Bureau of Economic Research. Jaeger: Bureau of Labor Statistics. **SR** National Bureau of Economic Research Working Paper: 5835; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 21. **PR** \$5.00. **JE** I20, J24, J31. **KW** Labor Studies. Education. Wages. School Attendance.

AB Angrist and Krueger use quarter of birth as an instrument for educational attainment in wage equations. To support a casual interpretation of their estimates, they argue that compulsory school attendance laws alone account for the association between quarter of birth and earnings. In this note the authors present evidence that the association between quarter of birth and earnings is too strong to be fully explained by compulsory school attendance laws in the sample studied by Angrist and Krueger. Moreover, while the association between quarter of birth and educational attainment was weaker for more recent cohorts, the authors found no evidence that the strength of the relationship between quarter of birth and earnings was also weaker in these cohorts. In addition, the authors present evidence that suggests the association between quarter of birth and earnings or other labor market outcomes

existed for cohorts that were not bound by compulsory attendance laws.

Bover, Olympia

PD August 1997. **TI** Cambios en la Composicion del Empleo y Actividad Laboral Femenina. **AA** Banco de Espana. **SR** Banco de Espana. Servicio de Estudios. Documento de Trabajo: 9714; Banco de Espana. Seccion de Publicaciones. Negociado de Distribucion y Gestion. Alcala 50. 28104 Madrid. Website: www.bde.es. **PG** 14. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** J20. **KW** Labor Supply. Employment Composition. Skilled Employment. Technical Progress.

AB Changes in the Spanish employment structure for 1976-1992 are analyzed according to sex, qualification and sector. In order to do so changes in skilled employment are broken down in two parts, which are in turn split up by sex. The first part measures the variations between sectors, keeping constant the composition of each sector. The second part measures the changes within sectors, fixing the contribution of the sector to total employment. It is found that, in the important increase occurred in the proportion of skilled employment, service sector growth dominates technical progress although the latter explains more than 30% of the increase since 1985. According to sex, female employment absorbs 80% of skilled employment due to the greater weight of services, and the total increase due to technical progress.

Bradford, David F.

PD January 1997. **TI** The Influence of Income Tax Rules on Insurance Reserves. **AU** Bradford, David F.; Logue, Kyle D. **AA** Bradford: Princeton University and National Bureau of Economic Research. Logue: University of Michigan. **SR** National Bureau of Economic Research Working Paper: 5902; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 42. **PR** \$5.00. **JE** G22, G38, H24, H25. **KW** Public Economics. Taxation. Insurance. Loss Reserves. Income Tax.

AB Federal income tax rules, and especially changes in those rules, combine with financial market circumstances (interest rates) to create incentives bearing on property-casualty insurers' decisions regarding the level of loss reserves to report. These incentives have varied substantially over the period since 1980. In particular, transition effects due to the Tax Reform Act of 1986 created unusually large incentives to overstate reserves in reporting years 1985-1987. Because they amount to forecasts of quite variable quantities, reserves are inevitably subject to correction over time, making inferences from the time series evidence difficult. Furthermore, taxes are not the only sources of biasing incentives that may vary from time to time. Still, the picture in aggregate industry data presented in the paper is broadly consistent with the tax-motivated reserving hypothesis.

Brennan, Geoffrey

PD October 1997. **TI** Trust in the Shadow of the Courts. **AU** Brennan, Geoffrey; Guth, Werner; Kliemt, Hartmut. **AA** Brennan: Australian National University. Guth: Humboldt University. Kliemt: Gerhard Mercator University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9789; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg,

The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 40. **PR** no charge. **JE** A11, A13, C72, D74, K12. **KW** Evolutionary Game Theory. Intrinsic Motivation. Trust Relationships. Court System. Legal Litigation. Crowding Out.

AB If contract enforcers must be randomly selected from the same population and thus are as opportunistic as ordinary traders could a system of adjudication nevertheless increase the degree to which contractual obligations on large anonymous markets are fulfilled? Adopting an indirect evolutionary approach with endogenous preference formation it can be shown that without superior behavior of adjudicators an adjudication system can induce untrustworthy traders to behave as if trustworthy. However, in the presence of occasional mistakes adjudication will merely slow down but not fully eliminate the evolutionary advantage of untrustworthy types. Only if arbitrators become judges who receive a fixed income occasional mistakes will not favor untrustworthy types. But even then under non-optimal court politics and unfavorable parameter constellations in a low trust environment the introduction of courts may in fact contribute to the crowding out of the trustworthy.

Brenner, David

PD June 1997. **TI** The Vickrey-Clarke-Groves Versus the Simultaneous Ascending Auction: An Experimental Approach. **AU** Brenner, David; Morgan, John. **AA** Princeton University. **SR** Princeton Financial Research Center Memorandum: 188; Financial Research Center, Department of Economics, Princeton University, Princeton, New Jersey 08544-1021. **PG** 21. **PR** \$3.00 for U.S. mailings; \$6.00 for foreign mailings. **JE** D44, L50. **KW** Auctions. Experiments. Complementarities.

AB In private values settings, the Vickrey-Clarke-Groves (VCG) mechanism leads to efficient auction outcomes, while the theoretical properties of the Simultaneous Ascending (SA) auction are not well understood. This leads the authors to compare the properties of an SA and a VCG auction in an experimental setting with multiple objects having complementarities. Statistically, the authors find little to distinguish the two auctions with both auction forms achieving more than 98% efficiency and extracting roughly 95% of the available surplus. Finally, in contrast to experimental results in single object VCG settings, the theoretical prediction of demand revelation in the VCG auction is largely supported in their experiments.

Brenner, Menachem

PD June 1997. **TI** No-Arbitrage Option Pricing: New Evidence on the Validity of the Martingale Property. **AU** Brenner, Menachem; Eom, Young Ho. **AA** Brenner: New York University. Eom: Federal Reserve Bank of New York. **SR** New York University, Salomon Center, Working Papers: S/97/10; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 35. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** G13. **KW** Arbitrage. Martingale. Option Pricing. Risk-Neutral Pricing. Contingent Pricing.

AB The no-arbitrage approach to option pricing implies that risk-neutral prices follow a martingale. The validity of this property has been tested and rejected by Longstaff (1995). Since he tested the general framework, his results have far reaching and disturbing implications for contingent claims

pricing. This paper proposes a new method to test the martingale property. This method is based on the Laguerre polynomial series. The tests use options and futures on the S&P500 index. The new methodology and data show that the martingale property cannot be rejected. This result implies that the general approach is still valid and the existence of frictions only adds noise. Testing more specific pricing models is relevant again.

Brown, Donald J.

TI Incomplete Derivative Markets and Portfolio Insurance. **AU** Aliprantis, C. D.; Brown, Donald J.; Werner, J.

PD February 1998. **TI** Uniqueness, Stability, and Comparative Statics in Rationalizable Walrasian Markets. **AU** Brown, Donald J.; Shannon, Chris. **AA** Brown: Yale University. Shannon: University of California. **SR** Yale Cowles Foundation Discussion Paper: 1170; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 14. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** D50. **KW** Walrasian Equilibria. Tatonnement. Local Stability. Rationalizability.

AB This paper studies the extent to which qualitative features of Walrasian equilibria are refutable given a finite data set. In particular, the authors consider the hypothesis that the observed data are Walrasian equilibria in which each price vector is locally stable under tatonnement. The main result shows that a finite set of observations of prices, individual incomes and aggregate consumption vectors is rationalizable in an economy with smooth characteristics if and only if it is rationalizable in an economy in which each observed price vector is locally unique and stable under tatonnement. Moreover, the equilibrium correspondence is locally monotone in a neighborhood of each observed equilibrium in these economies. Thus the hypotheses that equilibria are locally stable under tatonnement, equilibrium prices are locally unique and equilibrium comparative statics are locally monotone are not refutable with a finite data set.

Buchinsky, Moshe

TI On the Number of Bootstrap Repetitions for Bootstrap Standard Errors, Confidence Intervals, and Tests. **AU** Andrews, Donald W. K.; Buchinsky, Moshe.

Buisan, Ana

PD July 1997. **TI** Un Indicador de Gasto en Construcción para la Economía Española. **AU** Buisan, Ana; Perez, Miguel. **AA** Banco de España. **SR** Banco de España. Servicio de Estudios. Documento de Trabajo: 9711; Banco de España. Sección de Publicaciones. Negociado de Distribución y Gestión. Alcalá 50. 28104 Madrid. Website: www.bde.es. **PG** 72. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** L74. **KW** Leading Indicators. Construction Spending. Execution Schedule.

AB This paper presents a spending indicator on construction for the Spanish economy that synthesizes the information contained in the leading indicators in terms of actual spending, which is the relevant one for the analysis of the economic situation. Prior to that a study of the building sector is made, both from the supply and demand sides, pointing out its main characteristics, and estimating its relative weights according to the type of building and the type of agent. Using the leading indicators and the execution schedules associated to different

types of building and/or agent, the proposed indicator is obtained by linear combination applying the estimated weights. Also, using the same tool, the situation of the building sector is analyzed, offering a complementary approach to the one derived from other indicators available for this macroeconomic aggregate.

Buiter, Willem H.

PD January 1997. **TI** A Portfolio Approach to a Cross-Sectoral and Cross-National Investment Strategy in Transition Economies. **AU** Buiter, Willem H.; Lago, Ricardo; Rey, Helene. **AA** Buiter: University of Cambridge and National Bureau of Economic Research. Lago: European Bank for Reconstruction and Development. Rey: London School of Economics. **SR** National Bureau of Economic Research Working Paper: 5882; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 39. **PR** \$5.00. **JE** E44, F21, G11, G24, O16. **KW** International Finance. Portfolio Choice. Investment. Transition Economies.

AB This paper takes a systematic look at the portfolio choice problem faced by Investment Banks or Funds investing in transition economies. The authors relate the performance of projects in the transition economies to the broader macroeconomic and international environment, which affect the project through its input-output structure and its financial balance sheet. Among the macroeconomic determinants of enterprise behavior that the authors consider are productivity growth, real wage growth, movements in the international terms of trade, shocks to the relative price of traded and non-traded goods, domestic and foreign interest rates, currency depreciation and the rate of inflation. The authors evaluate the attractiveness of alternative investment strategies and provisioning rules from the perspective of portfolio theory.

PD March 1997. **TI** Enterprises in Transition: Macroeconomic Influences on Enterprise Decision-Making and Performance. **AU** Buiter, Willem H.; Lago, Ricardo; Rey, Helene. **AA** Buiter: London School of Economics and University of Cambridge. Lago: European Bank for Reconstruction and Development. Rey: London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 340; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 54. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** D23, E63, G11, G20, O10, O57, P52. **KW** Transition Economies. Macroeconomic Stability. Enterprise Performance.

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

Bulow, Jeremy

PD January 1997. **TI** The Generalized War of Attrition. **AU** Bulow, Jeremy; Klemperer, Paul. **AA** Bulow: Yale University and National Bureau of Economic Research. Klemperer: Oxford University. **SR** National Bureau of Economic Research Working Paper: 5872; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** \$5.00. **JE** D43, D44, D72, L13, O30. **KW** Public Economics. Coalition Formation. Oligopoly. Private Information.

AB The authors generalize the War of Attrition model to allow for N+K firms competing for N prizes. Two special cases are of particular interest. First, if firms continue to pay their full costs after dropping out (as in a standard-setting context), each firm's exit time is independent both of K and of the actions of other players. Second, in the limit in which firms pay no costs after dropping out (as in a natural-oligopoly problem), the field is immediately sorted to N+1 firms. Furthermore, the authors have perfect sorting, so it is always the K-1 lowest-value players who drop out in zero time, even though each player's value is private information to the player. The authors apply their model to politics, explaining the length of time it takes to collect a winning coalition to pass a bill.

Burgess, Simon

PD December 1996. **TI** An International Comparison of Employment Adjustment to Exchange Rate Fluctuations. **AU** Burgess, Simon; Knetter, Michael M. **AA** Burgess: University of Bristol. Knetter: Dartmouth College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5861; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 19. **PR** \$5.00. **JE** E24, F14, F31, J21. **KW** International Trade. International Finance. Investment. Exchange Rates. Employment.

AB This paper evaluates the response of employment to exchange rate shocks at the industry level for the G-7 countries. Using a simple empirical framework that places little a priori structure on the pattern of response to shocks, the authors find the data are consistent with the view that employment in European industries, at least France and Germany, is much less influenced by exchange rate shocks and much slower to adjust to long run steady states. The United States, Japan, Canada, the United Kingdom and Italy appear to adjust more quickly. German and Japanese employment are quite insensitive to exchange rate fluctuations, consistent with previous research on output and markup responses to exchange rates.

Caballero, Juan Carlos

PD August 1997. **TI** La Utilizacion de los Indices de Condiciones Monetarias Desde la Perspectiva de un Banco Central. **AU** Caballero, Juan Carlos; Martinez-Pages, Jorge; Sastre, M. Teresa. **AA** Banco de Espana. **SR** Banco de Espana. Servicio de Estudios. Documento de Trabajo: 9716; Banco de Espana. Seccion de Publicaciones. Negociado de Distribucion y Gestion. Alcala 50. 28104 Madrid. Website: www.bde.es. **PG** 44. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** E44. **KW** Monetary Indicators. Monetary Policy. Weighted Index.

AB In the short and medium term, money market conditions are an important factor in the determination of agents' spending

decisions and, therefore, of economic growth and inflation. Thus the concern is for designing suitable indicators for them, especially in view of the problems encountered when using monetary and credit aggregates to measure variations in the degree of monetary tightness. Recently, some analysts and central banks have begun to use several indicators which are a combination of interest rates and exchange rates. This paper analyses both the potential usefulness of monetary condition indicators for central banks and the problems which arise in their construction and interpretation.

Calvet, Laurent

TI A Multifractal Model of Asset Returns. **AU** Mandelbrot, Benoit; Fisher, Adlai; Calvet, Laurent.

PD September 1997. **TI** Large Deviations and the Distribution of Price Changes. **AU** Calvet, Laurent; Fisher, Adlai; Mandelbrot, Benoit. **AA** Calvet and Fisher: Yale University. Mandelbrot: Yale University and Watson Research Center. **SR** Yale Cowles Foundation Discussion Paper: 1165; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 29. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** G12, G13. **KW** Stochastic Process. Time Deformation. Scaling Laws. Self-Similarity. Self-Affinity.

AB The Multifractal Model of Asset Returns (MMAR 1997) proposes a class of multifractal processes for the modelling of financial returns. In that paper, multifractal processes are defined by a scaling law for moments of the processes' increments over finite time intervals. In the present paper, the authors discuss the local behavior of multifractal processes. The authors employ local Holder exponents, a fundamental concept in real analysis that describes the local scaling properties of a realized path at any point in time. In contrast with the standard models of continuous time finance, multifractal processes contain a multiplicity of local Holder exponents within any finite time interval. The authors characterize the distribution of Holder exponents by the multifractal spectrum of the process.

TI Multifractality of Deutschemark/US Dollar Exchange Rates. **AU** Fisher, Adlai; Calvet, Laurent; Mandelbrot, Benoit.

Calvo, Guillermo A.

PD July 1997. **TI** Rational Herd Behavior and the Globalization of Securities Markets. **AU** Calvo, Guillermo A.; Mendoza, Enrique G. **AA** Calvo: University of Maryland. Mendoza: Duke University. **SR** Duke University Department of Economics Working Papers: 97/26; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 44. **PR** no charge. **JE** F34, F36, G11, G15. **KW** Herd Behavior. Contagion. Capital Mobility. Portfolio Choice.

AB This paper shows that globalization of securities markets exacerbates the volatility of capital flows by strengthening incentives for herding behavior. This is a prediction of a mean-variance portfolio optimization model with imperfect information, in which investors acquire country-specific expertise at a fixed cost and incur variable reputational costs. The model produces equilibria in which incentives to confirm rumors decrease with globalization. Simulations based on equity markets data and country credit ratings suggest that herd behavior can induce large capital outflows from emerging

markets.

Campbell, John Y.

TI Inflation, Real Interest Rates, and the Bond Market: A Study of UK Nominal and Index-Linked Government Bond Prices. **AU** Barr, David G.; Campbell, John Y.

PD December 1996. **TI** Consumption and Portfolio Decisions When Expected Returns are Time Varying. **AU** Campbell, John Y.; Viccira, Luis M. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5857; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 48. **PR** \$5.00. **JE** G11, G12. **KW** Portfolio Choice. Asset Pricing. Economic Fluctuations. Growth. Monetary Economics.

AB This paper proposes and implements a new approach to a classic unsolved problem in financial economics: the optimal consumption and portfolio choice problem of a long-lived investor facing time-varying investment opportunities. The investor is assumed to be infinitely-lived, to have recursive Epstein-Zin-Weil utility, and to choose in discrete time between a riskless asset with a constant return, and a risky asset with a constant return variance whose expected log return follows an AR(1) process. The paper approximates the choice problem by log-linearizing the budget constraint and Euler equations, and derives an analytical solution to the approximate problem. When the model is calibrated to U.S. stock market data, it implies that intertemporal hedging motives greatly increase, and may even double, the average demand for stocks by investors whose risk-aversion coefficients exceed one.

Canton, Erik

PD May 1997. **TI** Growth and the Cycle: Creative Destruction Versus Entrenchment. **AU** Canton, Erik; Uhlig, Harald. **AA** CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9742; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 41. **PR** no charge. **JE** E32, H21, L16. **KW** Economic Growth. Cyclical Variability. Creative Destruction. Entrenchment.

AB Newly established firms often try to secure their market position by building up a base of loyal customers. While recessions may not destroy technological leadership, they may be harmful for such firm-customer relationships. Without such customer bases, these firms find themselves more vulnerable to attacks by competitors. We formulate this idea within an Aghion-Howitt-type model of creative destruction and discuss its implications for growth. In the context of this model, recessions might be good for growth since they weaken the incumbent firm's position, and thereby stimulate research by outside firms. The model allows for the extreme case where the leading firm can be so entrenched that growth ceases, unless a recession shakes up its customer base. We find a one- to-one relationship between the average growth rate and the cyclical variability, a U-shaped relationship between the average speed of building up good customer relationships and the average growth rate, and a positive relationship between the arrival rate of recessions and average growth. It is finally shown that an appropriate stochastic tax program can implement the social planner's solution. In some cases, general equilibrium effects

may generate interesting results, conflicting intuition from a partial equilibrium approach.

PD June 1997. **TI** Fiscal Policy in a Stochastic Model of Endogenous Growth. **AA** CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9763; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 45. **PR** no charge. **JE** E32, E62, J24, O41. **KW** Fiscal Policy. Economic Growth. Business Cycles.

AB It is nowadays widely believed that public schooling may contribute favorably to long-term economic growth. The income tax rates that are needed to finance government spending typically show an erratic time pattern. Such tax randomness could increase the intensity of the business cycle. Thus, government spending on education may spur economic growth, but the other side of the coin is that this is likely to increase the intensity of cyclical fluctuations. These issues are discussed in the context of a stochastic endogenous growth model with learning-by-doing as well as schooling activity. The key results are: (i) income taxation may go hand in hand with increased economic growth under certain conditions, (ii) tax randomness is responsible for a modest fraction of cyclical variability, (iii) the inclusion of stochastic taxation brings the model closer to the U.S. business cycle experience, (iv) the employment variability puzzle can be solved by introducing stochastic discounting, (v) the latter model can successfully pass a Wald-test, (vi) the interaction between long-term economic growth and the business cycle can be positive as well as negative, and (vii) the model typically suggests that capital taxes stabilize the economy.

Canziani, Patrizia

PD July 1997. **TI** Imperfect Information, Firing Costs and Unemployment. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 357; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 39. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** D83, E24. **KW** Firing Costs. Unemployment.

AB This paper uses a general equilibrium search model to study the effects of firing costs in the presence of imperfect information about workers' ability. Firing costs change the way firms form expectations about workers' abilities from their employment history. The model exhibits the standard implications that firing costs lower the option value of hiring workers of uncertain productivity, thus youth unemployment is higher. More importantly, firing costs increase the stigma associated with a bad employment history which may lead to higher long-term unemployment. While the pool of unemployed has higher average productivity, this only slightly mitigates against the first two effects. Finally, firms post fewer vacancies.

PD July 1997. **TI** Firing Costs and Stigma: An Empirical Analysis. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 358; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk.

PG 39. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE D83. KW Unemployment Duration. Information.

AB When information about workers' abilities is imperfect, past employment histories are important determinants of unemployment duration. This paper studies the effects of employment protection laws on unemployment spells in two countries: Italy and Spain. Italy and Spain's adoption of fixed-term contracts with lower firing costs in the mid 1980's provides an interesting empirical framework to study the effects of policies affecting firing costs. The evidence presented supports the hypothesis that when firing costs increase, so does the stigma attached to bad employment histories. First, I show that in Italy people, who became unemployed because of termination of the employment contract have 10 percent lower probability per year to remain unemployed than fired workers. Second, in Spain, workers dismissed from a temporary job have 30 percent shorter unemployment spells than workers fired from regular contracts.

Card, David

PD May 1997. TI Would Financial Incentives for Leaving Welfare Lead Some People to Stay on Welfare Longer? An Experimental Evaluation of Entry Effects in the Self-Sufficiency Project. AU Card, David; Robins, Philip K.; Lin, Winston. AA Card: Princeton University. Robins: University of Miami. Lin:MDRC. SR Princeton Industrial Relations Section Working Paper: 380; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. PG 55. PR \$2.00. JE I38, J10. KW Welfare. Participation. Random Experiment. Canada. Self-Sufficiency.

AB The Self-Sufficiency Project (SSP) is a large-scale social experiment being conducted in Canada to evaluate the effects of an earnings supplement (or subsidy) for long-term welfare recipients who find a full-time job and leave income assistance. The supplement is available to single parents who have received income assistance for a year or more. An important concern is whether the availability of the supplement would lead some new income assistance recipients to prolong their stay on welfare in order to gain eligibility. A separate experiment was conducted with new welfare recipients to measure the magnitude of this effect. One half of a group of new recipients were informed that they would be eligible to receive SSP if they stayed on income assistance for a year; the other half were randomly assigned to a control group. Our analysis indicates a very modest "delayed exit" effect among the treatment group relative to the controls.

PD June 1997. TI Adapting to Circumstances: The Evolution of Work, School, and Living Arrangements Among North American Youth. AU Card, David; Lemieux, Thomas. AA Card: Princeton University and National Bureau of Economic Research. Lemieux: Universite de Montreal, CIRANO, and National Bureau of Economic Research. SR Princeton Industrial Relations Section Working Paper: 386; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. PG 67. PR \$2.00. JE D31, J22, J23. KW Youth Employment. School Employment. Family Formation. Canada.

AB The authors use comparable micro data sets for the U.S. 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. The authors 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, they 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 U.S. 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 U.S.

PD July 1997. TI School Finance Reform, the Distribution of School Spending, and the Distribution of SAT Scores. AU Card, David; Payne, Abigail A. AA Card: Center for Advanced Study in Behavioral Sciences and Princeton University. Payne: University of Toronto. SR Princeton Industrial Relations Section Working Paper: 387; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. PG 56. PR \$2.00. JE H52, I22. KW Educational Finance. Test Scores. Equalization. School Spending.

AB The authors study the effects of school finance reforms on the distribution of school spending across richer and poorer districts, and the consequences of spending equalization for the distribution of SAT scores across children from different family backgrounds. They find that states where the school finance system was declared unconstitutional in the 1980's increased the relative funding of low-income districts. Increases in state funds available to poorer districts led to comparable or only slightly smaller increases in the relative spending of these districts, implying significant equalization of expenditures per pupil across richer and poorer districts. Using micro samples of SAT scores from this same period, the authors study the effect of changes in spending inequality within states on the gaps in test scores for children from different family backgrounds. The authors find some evidence that the equalization of spending across districts leads to a narrowing of test score outcomes.

PD December 1997. TI A Reanalysis of the Effect of the New Jersey Minimum Wage Increase on the Fast-Food Industry with Representative Payroll Data. AU Card, David; Krueger, Alan B. AA Card: UC Berkley and National Bureau of Economic Research. Krueger: Princeton University and National Bureau of Economic Research. SR Princeton Industrial Relations Section Working Paper: 393; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. PG 46. PR \$1.50. JE J23, J31, L81. KW Minimum Wage. Fast-Food Industry. Employment.

AB This paper re-examines the effect of the 1992 New Jersey minimum wage increase on employment in the fast-food industry. Both a longitudinal sample and a repeated-cross-section sample indicate very similar or slightly faster employment growth in New Jersey relative to eastern Pennsylvania after the rise in New Jersey's minimum wage. The authors also measure the effects of the 1996 increase in the Federal minimum wage, which raised the minimum wage in Pennsylvania but not in New Jersey. Consistent with earlier experiences, they find no indication of relative employment losses in Pennsylvania. In light of these findings, they go on to re-examine employment trends in the sample of fast-food restaurants assembled by the Employment Policies Institute (EPI) and David Neumark and William Wascher. The differences between this sample and both the BLS data and an earlier sample are attributable to a small set of restaurants owned by a single franchise.

Casella, Alessandra

PD December 1996. **TI** Product Standards Coalitions in a Market Without Borders. **AA** Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5853; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** F15, F42, L16, L51, L52. **KW** International Finance. International Trade. Investment. Standards. Regulation.

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

Castro, Francisco

PD August 1997. **TI** Joint Dynamics of Spot and Forward Exchange Rates. **AU** Castro, Francisco; Novales, Alfonso. **AA** Castro: Banco de Espana; Novales: Universidad Complutense. **SR** Banco de Espana. Servicio de Estudios. Documento de Trabajo: 9715; Banco de Espana. Seccion de Publicaciones. Negociado de Distribucion y Gestion. Alcala 50. 28104 Madrid. Website: www.bde.es. **PG** 22. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** C32, F31. **KW** Spot Rates. Exchange Rates. Efficiency. Risk Premium.

AB One and three-month forward exchange rates for the deutsche mark, French franc, sterling pound, yen and peseta, relative to the U.S. dollar, seem to be cointegrated with future spot rates, but not with current exchange rates. We confirm the unbiasedness hypothesis for this data set, as a robust cointegrating relation between forward and future spot rates, although forward rates are poor predictors of future exchange rates. We also argue that the behavior of exchange rates seems to be quite consistent with the unpredictability of exchange rates at one and three-month horizons. Forward rates seem to be rather passive, mostly reflecting current exchange rates, rather than anticipating future exchange rates fluctuations. These results suggest that reducing the analysis of the information content of forward rates to cointegration tests with current and future exchange rates would be misleading. We find some evidence of risk/return premium but, being of minimum size, suggests that recent arguments on the inefficiency of currency markets are theoretically sound, but of minor empirical relevance.

Chao, John C.

PD July 1997. **TI** Model Selection in Partially Nonstationary Autoregressive Processes with Reduced Rank Structure. **AU** Chao, John C.; Phillips, Peter C. B. **AA** Chao: University of Maryland. Phillips: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1155; Yale University, Cowles Foundation Library, Box 208281, New

Haven, CT 06520. **PG** 45. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** C32. **KW** Cointegrating Rank. Model Determination. Order Selection. Reduced Rank. Vector Autoregression.

AB The current practice for determining the number of cointegrating vectors, or the cointegrating rank, in a vector autoregression (VAR) requires the investigator to perform a sequence of cointegration tests. However, this type of sequential procedure does not lead to consistent estimation of the cointegrating rank. Moreover, these methods take as a given the correct specification of the lag order of the VAR. This paper addresses these issues by extending the analysis of Phillips and Ploberger (1996) on the Posterior Information Criterion (PIC) to a partially nonstationary vector autoregressive process with reduced rank structure. This extension allows lag length and cointegrating rank to be jointly selected by the criterion, and it leads to the consistent estimation of both. In addition, the authors also evaluate the finite sample performance of PIC relative to existing model selection procedures, BIC and AIC, through a Monte Carlo study.

Chari, V. V.

PD October 1996. **TI** Sticky Price Models of the Business Cycle: Can the Contract Multiplier Solve the Persistence Problem? **AU** Chari, V. V.; McGrattan, Ellen R.; Kehoe, Patrick J. **AA** Chari: University of Minnesota. McGrattan: Federal Reserve Bank of Minneapolis and National Bureau of Economic Research. Kehoe: University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5809; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** \$5.00. **JE** E31, E32, E51. **KW** Business Cycles. Sticky Prices. Staggered Pricing.

AB The purpose of this paper is to construct a quantitative equilibrium model with price setting and use it to ask whether staggered price setting can generate persistent output fluctuations following monetary shocks. We construct a business cycle version of a standard sticky price model in which imperfectly competitive firms set nominal prices in a staggered fashion. We assume that prices are exogenously sticky for a short period of time. Persistent output fluctuations require endogenous price stickiness in the sense that firms choose not to change prices very much when they can do so. We find the amount of endogenous stickiness to be small. As a result, we find that such a model cannot generate persistent movements in output following monetary shocks.

PD January 1997. **TI** Monetary Shocks and Real Exchange Rates in Sticky Price Models of International Business Cycles. **AU** Chari, V. V.; Kehoe, Patrick J.; McGrattan, Ellen R. **AA** Chari: University of Minnesota. McGrattan: Federal Reserve Bank of Minneapolis and National Bureau of Economic Research. Kehoe: University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5876; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** \$5.00. **JE** E31, F31, F32, F41. **KW** Business Cycles. Growth. International Finance. Exchange Rates. Sticky Prices.

AB The data show large and persistent deviations of real exchange rates from purchasing power parity. Recent work has shown that to a large extent these movements are driven by

deviations from the law of one price for traded goods. In the data, real and nominal exchange rates are about 6 times as volatile as relative price levels and they both are highly persistent, with serial correlations of 0.85 and 0.83, respectively. This paper develops a sticky price model with price discriminating monopolists, which produces deviations from the law of one price for traded goods. The authors benchmark model, which has prices set for one quarter at a time and a unit consumption elasticity of money demand, does not come close to reproducing these observations. A model which has producers setting prices for 6 quarters at a time and a consumption elasticity of money demand of 0.27 does much better.

Charlier, E.

PD February 1997. **TI** An Analysis of Housing Expenditure Using Semiparametric Models and Panel Data. **AU** Charlier, E.; Melenberg, Bertrand; van Soest, Arthur. **AA** Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9714; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 36. **PR** no charge. **JE** C14, C33, R21. **KW** Sample Selection. Engel Curves. Semiparametric Models. Panel Data.

AB In this paper we model expenditure on housing for owners and renters by means of endogenous switching regression models for panel data. We explain the share of housing in total expenditure from a household specific effect, family characteristics and total expenditure, where the latter is allowed to be endogenous. We consider both random and fixed effects panel data models. We compare estimates for the random effects model with estimates for the linear panel data model in which selection only enters through the fixed effects and with estimates allowing for fixed effects and a more general type of selectivity. Differences appear to be substantial. The results imply that the random effects model as well as the linear panel data model are too restrictive.

PD February 1997. **TI** An Analysis of Housing Expenditure Using Semiparametric Cross-Section Models. **AU** Charlier, E.; Melenberg, Bertrand; van Soest, Arthur. **AA** Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9715; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 26. **PR** no charge. **JE** C14, R21. **KW** Sample Selection. Engel Curves. Semiparametric Models. Cross-Section Models.

AB In this paper we model expenditure on housing for owners and renters by means of endogenous switching regression models using cross-section data. We explain the share of housing in total expenditure from family characteristics and total expenditure, where the latter is allowed to be endogenous. We apply various existing parametric and semiparametric techniques for cross-section data. Exogeneity of total expenditures is rejected for the parametric models but not for most semiparametric models. The results are compared to the basis of graphs of the estimated relationship between the budget share spent on housing and the logarithm of total expenditure and on the basis of budget elasticities.

PD July 1997. **TI** Equivalence Scales for the Former West Germany. **AA** Tilburg University. **SR** Tilburg

Center for Economic Research Discussion Paper: 9774; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 33. **PR** no charge. **JE** C23, C25, I31. **KW** Lifetime Equivalence Scales. Panel Data. Parametric Models.

AB Equivalence scales provide answers to questions like how much a household with four children needs to spend compared to a household with two children or how much a childless couple needs to spend compared to a single person household to attain the same welfare level. These are important questions for child allowances, social benefits and to assess the cost of children over the life-cycle for example. The latter is also interesting from a theoretical point of view, especially if future events are allowed to be uncertain. We discuss equivalence scales in an intertemporal setting with uncertainty. To estimate equivalence scales we use subjective data on satisfaction with life and satisfaction with income to represent the welfare level. Because satisfaction is measured on a discrete scale we use limited dependent variable models in estimation. The results are based on a panel from German households (GSOEP). Using satisfaction with life data we find that larger households do not need any additional income to be as satisfied with their life as a couple. Using satisfaction with income, however, indicates that an increase in the household size leads to a significant drop in the satisfaction with their income. This result is used to compute equivalence scales.

Chevalier, Judith

PD December 1996. **TI** Are Some Mutual Fund Managers Better Than Others? Cross-Sectional Patterns in Behavior and Performance. **AU** Chevalier, Judith; Ellison, Glenn. **AA** Chevalier: University of Chicago and National Bureau of Economic Research. Ellison: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5852; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** \$5.00. **JE** G14, G23, J41, J63. **KW** Asset Pricing. Corporate Finance. Industrial Organization. Managers.

AB In this paper the authors explore cross-sectional differences in the behavior and performance of mutual fund managers. In their simplest regression of a fund's market excess return on characteristics of its manager, the authors find that younger managers earn much higher returns than older managers and that managers who attended colleges with higher average SAT scores earn much higher returns than do managers from less selective institutions. These differences appear to derive both from systematic differences in expense ratios and risk-taking behavior and from additional systematic differences in performance -- managers from higher SAT schools have higher risk-adjusted excess returns. Managers with the best characteristics may on average beat the market. The paper also presents a preliminary look at the labor market for mutual fund managers. The authors' data suggest that managerial turnover is more performance sensitive for younger managers.

Chinn, Menzie D.

PD November 1996. **TI** Financial and Capital Account Liberalization in the Pacific Basin: Korea and Taiwan During the 1980s. **AU** Chinn, Menzie D.; Maloney, William F.

AA Chinn: University of California, Santa Cruz and National Bureau of Economic Research. Maloney: University of Illinois. **SR** National Bureau of Economic Research Working Paper: 5814; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** \$5.00. **JE** E43, F21, F36, O16. **KW** Capital Mobility. Interest Rates. Trade Liberalization. Stabilization. Korea.

AB This paper presents an alternative method of testing for financial capital mobility in the absence of forward exchange markets. A model of domestic interest rate determination during liberalization is applied to Korean and Taiwanese data. A variety of diagnostic and recursive tests are used to isolate structural breaks in the data. It is shown that Korean interest rates behave as if determined domestically until late 1988 or early 1989, while Taiwanese rates exhibit this behavior until early 1989. Thereafter, these economies' interest rates appear tightly linked to the Euro Yen rate. These results differ from the results of Jwa (1994) indicating two temporary openings for Korea. Greater integration of these domestic markets with world financial markets suggests that it will be more difficult for these countries to stabilize their economies in the face of capital inflows and outflows.

Cho, Dongchul

PD November 1996. **TI** Liberalization of Capital Flows in Korea: Big-Bang or Gradualism? **AU** Cho, Dongchul; Koh, Youngsun. **AA** Korea Development Institute. **SR** National Bureau of Economic Research Working Paper: 5824; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 37. **PR** \$5.00. **JE** F11, F13, F21, F32, O16. **KW** Korea. Capital Markets. Liberalization. International Trade.

AB Capital market liberalization has become an irreversible trend in Korea since 1992. With the current level of high interest rates in Korea, however, drastic full-scale liberalization would certainly attract a large amount of capital inflows and appreciate the Korean won. This would affect the price competitiveness of Korean products in international markets, which could bring about significant macro- instability in an economy like Korea which relies heavily upon external transactions. Through simulations using a macro-model based on the neoclassical long-run convergence and the Keynesian short-run dynamics, this paper attempts to provide some quantitative assessments of several alternative policy choices including the speed of liberalization.

Choi, In

PD September 1997. **TI** Regressions for Partially Identified, Cointegrated Simultaneous Equations. **AU** Choi, In; Phillips, Peter C. B. **AA** Choi: Kookmin University. Phillips: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1162; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 33. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** C22. **KW** 2SLS Regression. Partial Identification. Simultaneous Equation Models.

AB This paper studies regressions for partially identified equations in simultaneous equations models (SEM's) where all the variables are I(1) and cointegrating relations are present. Asymptotic properties of OLS and 2SLS estimators under partial identification are derived. The results show that the

identifiability condition is important for consistency of estimates in nonstationary SEM's as it is for stationary SEM's. Also, OLS and 2SLS estimators are shown to have different rates of convergence and divergence under partial identification, though they have the same rates of convergence and divergence for the two polar cases of full identification and total lack of identifiability. The OLS and 2SLS estimators have different distributions in the limit. Fully modified OLS regression and leads-and-lags regression methods are also studied. The results show that these two estimators have nuisance parameters in the limit under general assumptions on the regression errors and are not suitable for structural inference.

Choi, Jay Pil

PD December 1996. **TI** Patent Litigation as an Information Transmission Mechanism. **AA** Columbia University. **SR** Tilburg Center for Economic Research Discussion Paper: 9717; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 37. **PR** no charge. **JE** K41, L13, O34. **KW** Patent Litigation. Information Revelation. Entry Dynamics.

AB The literature on patent protection assumes a so-called fencepost system, in which there would be no need to refer to the courts over questions of interpretation. In reality, we observe a myriad of patent infringement suits through which questions of utility, novelty, and nonobviousness are independently ruled on by a court. Therefore, patent litigation accompanying initial imitations can reveal important information about the validity of the contested patents to other potential entrants. This paper explores the implications of such information revelation through patent litigation. It is shown that the payoffs for the patentee and the initial imitator are highly discontinuous in the degree of patent protection. Furthermore, strengthening intellectual property rights is not necessarily desirable for the patentee. The analysis also has implications for interpreting empirical data on imitation lags.

PD February 1997. **TI** Vertical Foreclosure With the Choice of Input Specifications. **AU** Choi, Jay Pil; Yi, Sang-Seung. **AA** Choi: Columbia University. Yi: Dartmouth College. **SR** Tilburg Center for Economic Research Discussion Paper: 9716; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 40. **PR** no charge. **JE** L22. **KW** Vertical Foreclosure. Input Specification.

AB This paper develops an equilibrium model of vertical foreclosure with the choice of input specifications. In this model, vertical foreclosure occurs as the upstream division of the integrated firm make a specialized input for its sister downstream division while it would, as an independent firm, provide a generalized input. The changes in incentives with vertical integration can be explained by the externalities the choice of a specialized input entails; vertical integration allows the upstream firm to internalize the benefit of raising the rival firm's costs at the downstream level. The choice of a specialized input by the integrated firm serves as a natural commitment mechanism not to supply the rival downstream firms, and thus enables us to dispense with the controversial price commitment assumption in the literature. We derive

conditions for equilibrium vertical foreclosure to occur and discuss its welfare consequences.

Christoffersen, H.

PD May 1998. **TI** Markets and Municipalities. A Study of the Behavior of the Danish Municipalities. **AU** Christoffersen, H.; Paldam, Martin. **AA** Christoffersen: AKF, Institute of Local Government Studies, Paldam; University of Aarhus. **SR** Aarhus Department of Economics Working Paper: 1998/03; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. **PG** 20. **PR** no charge. **JE** H72, L33. **KW** Municipal Behavior. Market Orientation. Quasimarkets.

AB The way 275 Danish municipalities organize 12 tasks shows a complex and changing pattern of market orientation. It is often discussed as an ideological issue; but we have failed to find a significant ideological factor in the pattern. However, factors belonging to four theories become significant: (f1) A modernization theory where the market is the new organization. (f2) A diffusion process, where the market starts in the biggest cities. (f3) A welfare coalition model, where diffusion is blocked if the median voter receives income from the public sector. (f4) A pressure theory, where municipalities use the market if they are forced to save. Finally, it is shown that the pattern in the Copenhagen metropolitan area is different from the one in the provinces.

Christopherson, Jon A.

PD November 1996. **TI** Conditioning Manager Alphas on Economic Information: Another Look at the Persistence of Performance. **AU** Christopherson, Jon A.; Ferson, Wayne E.; Glassman, Debra A. **AA** Christopherson: U.S. Equity Research. Ferson and Glassman: School of Business and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5830; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 45. **PR** \$5.00. **JE** G14, G23, G29. **KW** Equity Managers. Performance Evaluation. Expected Returns.

AB This paper evaluates persistence in the performance of institutional equity managers. The authors build on recent work on conditional performance evaluation, using time-varying conditional expected returns and risk measures. They find evidence that the investment performance of pension fund managers persists over time. A conditional approach is better able to detect this persistence to predict the future performance of the funds than are traditional methods. The performance persistence is especially concentrated in the managers with negative prior-period conditional alphas.

Clark, Peter

PD April 1997. **TI** Phillips Curves, Phillips Lines and the Unemployment Costs of Overheating. **AU** Clark, Peter; Laxton, Douglas. **AA** London School of Economics and International Monetary Fund. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 344; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 57. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** C51, E31, E52. **KW** Philips Curve. Unemployment. Monetary Policy.

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

Clemons, Erik K.

PD October 1997. **TI** Restructuring Institutional Block Trading: An Overview of the OptiMark System. **AU** Clemons, Erik K.; Weber, Bruce W. **AA** Clemons: University of Pennsylvania. Weber: New York University. **SR** New York University, Salomon Center Working Papers: S/97/21; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 10. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** G10, G23, G24, G28. **KW** Arbitrage. Information Technology. OptiMark. Block Trading.

AB Information technology has had a number of significant impacts on financial markets, enabling enormous increases in volumes and more sophisticated trading techniques such as program trading and index arbitrage. Despite improvements, some large institutional investors identify shortcomings in today's markets that make the process of buying or selling large, block orders time-consuming and costly. To address these concerns, a new trading system, OptiMark, has been built around several innovations including (1) a graphical user front-end for depicting trading preferences, and (2) a back-end built on high-performance computers that process expressions of trading interest according to a price-setting algorithm intended to achieve superior outcomes for traders. OptiMark provides a means for more cost-effective block trading, and expects to contribute for regulatory objectives. This paper details the operations of OptiMark, examines its adoption potential, and assesses the impact it may have on block trading, broker-dealer intermediaries, and the equities markets.

Conley, Tim

PD February 1998. **TI** Economic Distance, Spillovers, and Cross-Country Comparisons. **AU** Conley, Tim; Ligon, Ethan. **AA** Conley: Northwestern University. Ligon: University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 828; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/uch.html. **PG** 28. **PR** \$7.00 Domestic; \$14.00 International Surface Rate; not available after publication. **JE** O19. **KW** Economic Development. Economic Distance. Spillovers. Cross-Country Comparisons.

AB In this paper, we present empirical methods for cross-country comparisons that explicitly allow for interdependence among countries based upon the econometric model of Conley (1996). This model adds structure to cross-sectional data by using information on economic distances between countries. Specifically, countries are modeled as being located in a metric space where the dependence between countries' random

variables is a function of the economic distance between them. We present our empirical methods in the context of a particular application: the study of economic growth across countries. This choice is motivated by the popularity and importance of this topic. We use our spatial model to present empirical evidence in three ways. First, we present a characterization of the correlation structure of growth rates and related economic variables across countries. Second, we estimate an example cross-country regression using our model to allow for dependence in cross-sectional regressions. Finally, we investigate the potential for spillovers to explain growth across countries by looking at whether neighboring countries' characteristics are helpful in predicting growth rates.

Connolly, Michelle P.

PD May 1997. **TI** Learning to Learn: The Role of Imitation and Trade in Technological Diffusion. **AA** Duke University. **SR** Duke University Department of Economics Working Papers: 97/25; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 37. **PR** no charge. **JE** F10, F43, O14, O31, O40. **KW** Learning-to-Learn. Imitation. Innovation. Product Cycles. Endogenous Growth.

AB An endogenous growth model is developed demonstrating both static and dynamic gains from trade for developing nations due to the beneficial effects of trade on imitation and technological diffusion. The concept of learning-to-learn in both imitative and innovative processes is incorporated into a quality-ladder model with North-South trade. Domestic technological progress occurs via innovation or imitation, while growth is driven by technological advances in the quality of domestically available inputs, regardless of country of origin. In the absence of trade, Southern imitation of Northern technology leads to asymptotic conditional convergence between the two countries, demonstrating the positive effect of imitation on Southern growth. Free trade generally results in a positive feedback effect between Southern imitation and Northern innovation yielding a higher common steady-state growth rate. Immediate conditional convergence occurs. Thus, trade in this model confers dynamic as well as static benefits to the less developed South.

Cook, Philip J.

PD November 1996. **TI** The Effects of Short-Term Variation in Abortion Funding on Pregnancy Outcomes. **AU** Cook, Philip J.; Moore, Michael J.; Pamell, Allan M.; Pagnini, Deanna. **AA** Cook, Moore and Pamell: Duke University and National Bureau of Economic Research. Pagnini: Princeton University. **SR** National Bureau of Economic Research Working Paper: 5843; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 37. **PR** \$5.00. **JE** I18, J13. **KW** Health Care. Abortion. Birth Rates.

AB In 1978 North Carolina created a special fund to pay for abortions for indigent women. The appropriations for that fund have proven inadequate during five of the years in which it has been in operation. This on-again, off-again funding pattern provides a natural experiment for estimating the short-run effect of changes in the cost of abortions on the number of abortions (and births) to indigent women. The authors estimate the effects of funding termination on the abortion rate per month, the birth rate per month, and the probability that a pregnancy will end in abortion, for various demographic groups. The results suggest

that the decisions of poor black women aged 18-29 are particularly sensitive to the availability of abortion funding. Overall, approximately 3 in every 10 pregnancies that would have resulted in an abortion, had state funds been available, are instead carried to term.

Copeland, Brian R.

PD January 1997. **TI** A Simple Model of Trade, Capital Mobility, and the Environment. **AU** Copeland, Brian R.; Taylor, M. Scott. **AA** University of British Columbia and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5898; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 15. **PR** \$5.00. **JE** F10, F21, F41, Q10. **KW** International Trade. Pollution. Trade Liberalization. Capital Mobility.

AB This paper examines the interaction between relative factor abundance and income-induced policy differences in determining the pattern of trade and the effect of trade liberalization on pollution. If a rich and capital abundant North trades with a poor and labor abundant South, then free trade lowers world pollution. Trade shifts the production of pollution intensive industries to the capital abundant North despite its stricter pollution regulations. Pollution levels rise in the North while those in the South fall. These results can be reversed however, if the North-South income gap is too large for, in this case, the pattern of trade is driven by income induced pollution policy differences across countries. Capital mobility may raise or lower world pollution depending on the pattern of trade.

Coppejans, Mark

PD January 1997. **TI** Liquidity-Corrected Variance Ratios and the Effect of Foreign Equity Ownership on Information in an Emerging Market. **AU** Coppejans, Mark; Domowitz, Ian. **AA** Coppejans: Duke University. Domowitz: Northwestern University. **SR** Duke University Department of Economics Working Papers: 97/08; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 28. **PR** no charge. **JE** C52, F36, G14, O16. **KW** Emerging Markets. Foreign Ownership. Information. Variance Ratio Test. Volatility.

AB The authors ask whether foreign equity ownership affects the stability of information signals that are absorbed into prices in an emerging economy. They address both the effect of ownership restrictions exogenously imposed on stock ownership and the impact of introducing or widening foreign ownership through cross-listing. A methodology for variance ratio analysis is introduced that isolates information effects, correcting for liquidity and volume differences across stock series experiencing different degrees of foreign ownership. The authors find that foreign ownership does not affect the volatility of information in the absence of cross-listing. Foreign ownership introduced or accompanied by cross-listing of a stock series raises the variance of returns. This effect is found to operate in part through increases in volume traded on the domestic market following the listing, but also includes an independently identifiable increase in the volatility of information.

PD February 1997. **TI** Automated Trade Execution and Open Outcry Trading: A First Look at the GLOBEX Trading System. **AU** Coppejans, Mark; Domowitz, Ian. **AA** Coppejans: Duke University. Domowitz: Northwestern University. **SR** Duke University Department of Economics

Working Papers: 97/13; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. PG 51. PR no charge. JE G14, G15, G29. KW Automated Execution. Open-Outcry Trading. Adverse Selection. Market Efficiency. Stochastic Volatility.

AB The authors compare trading activity on the GLOBEX automated market and the associated open-outcry market of the Chicago Mercantile Exchange, across a set of four futures contracts. The comparison proceeds along lines of research interest in financial market microstructure, namely adverse selection effects, price clustering and its link to value revelation, equilibrium behavior and efficiency, and volatility dynamics. Adverse selection effects appear to be exacerbated on the automated market relative to the floor. Nevertheless, equilibrium trading behavior across markets is quite similar, and both markets appear to be reasonably efficient. This suggests that there is sufficient critical mass of traders to support operationally efficient behavior in the computerized venue, despite obvious liquidity differences across markets.

Corbae, Dean

PD September 1997. **TI** Band Spectral Regression with Trending Data. **AU** Corbae, Dean; Ouliaris, Sam; Phillips, Peter C. B. **AA** Corbae: University of Iowa. Ouliaris: University of Singapore. Phillips: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1163; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 48. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** C32. **KW** Band Spectral Regression. Stochastic Trends. Time Series. Integrated Process. Present Value Model.

AB Band spectral regression with deterministic and stochastic trends is considered. It is shown that conventional trend removal by regression in the time domain prior to band spectral regression leads to biased and consistent estimates of the parameters in a model with frequency dependent coefficients. Time domain and frequency domain procedures for dealing with this problem are examined. Trend removal in the frequency domain produces unbiased estimates and is recommended. An asymptotic theory is developed and the two cases of stationary data and cointegrated nonstationary data are compared. Efficient band spectral regression estimators and associated inferential methods are provided for models with deterministic and stochastic trends. Some supporting Monte Carlo evidence is presented. An empirical application to the present value model of stock prices is discussed. After removing trends in the frequency domain, the authors show that transitory fluctuations in dividends do not have significant coherence with stock price movements.

Corsetti, Giancarlo

PD December 1996. **TI** Optimal Government Spending and Taxation in Endogenous Growth Models. **AU** Corsetti, Giancarlo; Roubini, Nouriel. **AA** Corsetti: Yale University. Roubini: New York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5851; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 38. **PR** \$5.00. **JE** E62, H21, H41, O41. **KW** Public Economics. Human Capital. Fiscal Policy.

AB This paper analyzes optimal spending, tax and financial policies in models of endogenous growth where public

spending is productive. The authors first analyze optimal policies when the government is allowed to borrow and lend, rather than being restricted to run a balanced budget in every period. Next they develop a model with a separate human capital accumulation sector. Therefore, the properties of optimal policies depend on whether government spending affects the productivity of the final goods sector or the human capital accumulation sector. Then, the authors consider the policy implications of alternative assumptions about which factor of production benefits from the external effects of productive public goods. Lastly, they study the implications of restrictions on the menu of tax instruments available to the policy maker. The authors contrast optimal tax rates on human and physical capital under different assumptions on technology and distribution.

Crawford, Gregory S.

PD September 1997. **TI** New Products, New Programs, and Prices: Measuring Consumer Benefits to Changes in Cable Television Choices, 1989-1995. **AA** Duke University. **SR** Duke University Department of Economics Working Papers: 97/28; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 93. **PR** no charge. **JE** C31, C43, E31, L96. **KW** Cable Television. Quality Change. Price Index.

AB This paper evaluates the economic consequences of quality change and new service introductions in the cable television industry over the period 1989-1995. To address these issues, the authors develop and estimate a discrete-choice, differentiated product model of the demand for and the pricing of the complete set of cable services offered by systems in the industry. Their goal is to measure the benefits of changes in the choice set facing consumers over time. The authors' principal application is the construction of a quality-adjusted price index for cable television service for the period 1989-1995. The authors decompose changes in this index to changes in the set of services offered, in the programming offered on those services, in the prices of those services, and in demographic and market characteristics. They then compare this index to that obtained by the Bureau of Labor Statistics as part of the Consumer Price Index.

Cukierman, Alex

PD October 1997. **TI** When Does it Take a Nixon to Go to China? **AU** Cukierman, Alex; Tommasi, Mariano. **AA** CentER for Economic Research and Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9791; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 46. **PR** no charge. **JE** C72, D70, D80, E60. **KW** Policy Changes. Optimal Policies. Politicians.

AB Standard changes in policy are sometimes implemented by unlikely parties; for example, radical market-oriented reforms by populist parties and substantial steps towards peace by hawks like Begin or Nixon. To account for such episodes, we develop a framework in which incumbent politicians have more information than the voting public about the state of the world, and hence about which policies are optimal. Politicians are unable to transmit fully this information, since there is also incomplete information about their preferences. We conclude that popular support for a policy, or its credibility, depends on the policymaker-policy pair.

PD October 1997. **TI** Central Bank Autonomy and Exchange Rate Regimes -- Their Effects on Monetary Accommodation and Activism. **AU** Cukierman, Alex; Rodriguez, Pedro; Webb, Steven. **AA** Cukierman: Tel Aviv University, CentER for Economic Research and Tilburg University. Rodriguez and Webb: The World Bank. **SR** Tilburg CentER for Economic Research Discussion Paper: 9792.; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 32. **PR** no charge. **JE** E52, E58. **KW** Central Banks. Bank Independence. Monetary Policy.

AB The main objective of this paper is to determine empirically whether accommodation and the degree of policy activism differ systematically across countries with different degrees of central bank independence and different types of exchange rate regimes. This is done in two stages. First reaction functions and response coefficients are estimated in each country by running time series regressions. The resulting monetary policy response coefficients are then related to central bank independence and the type of exchange rate regime. One novelty of the paper is that it allows for the possibility that the effects of institutions on the accommodation of domestic wage inflation and of foreign inflation are different.

Cutler, David M.

PD January 1997. **TI** The Rise and Decline of the American Ghetto. **AU** Cutler, David M.; Glaeser, Edward L.; Vigdor, Jacob L. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5881; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 38. **PR** \$5.00. **JE** J15, J61, J70, R23. **KW** Public Economics. Segregation. Migration. Urban Economics.

AB This paper examines segregation in American cities from 1890 to 1990. The authors divide the century into three time periods. From 1890 to 1940, ghettos were born as blacks migrated to urban areas and cities developed vast expanses filled with nearly exclusively black housing. From 1940 to 1970, black migration continued and ghettos expanded. Since 1970, there has been a decline in segregation as blacks have moved to suburban areas and central cities have become less segregated. Across all of these time periods there is a strong positive relation between urban population or density and segregation. The authors then examine why segregation has varied so much over time. They find evidence that the mechanism sustaining segregation has changed. In the mid-20th century, segregation was a product of collective actions taken by whites to exclude blacks from their neighborhoods. By 1990, these legal barriers enforcing segregation had been replaced by decentralized racism.

Dahl, Gordon B.

PD May 1997. **TI** Mobility and the Return to Education: Testing a Roy Model with Multiple Markets. **AA** Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 381; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 80. **PR** \$250. **JE** C14, J24, J31, J61. **KW** Roy Model. Geographic Mobility. Education Returns. Selectivity Bias. Polychotomous Choice.

AB This paper develops and applies a new semi-parametric

correction for sample-selection in the context of a multi-market Roy model of mobility and earnings. This paper formulates a model where individuals choose which of the 50 states in the U.S. to live and work in. The new econometric methodology combines Lee's (1982) parametric maximum order statistic approach to multi-choice selection models with Ahn and Powell's (1993) more recent work on single index models. The resulting correction requires no assumptions on the joint distribution of the error terms in the outcome and multiple selection equations and can easily be adapted to a variety of other polychotomous choice problems. The empirical work confirms the role of comparative advantage in mobility decisions. The results suggest that self-selection of higher educated people to states with higher returns to education generally leads to downward biases in the returns to education in state-specific labor markets.

Daniels, Hennie

PD November 1997. **TI** Application of Neural Networks to House Pricing and Bond Rating. **AU** Daniels, Hennie; Kamp, Bart; Verkooijen, William. **AA** Daniels: Tilburg University and Erasmus University. Kamp: Tilburg University. Verkooijen: ABN-Amro Bank. **SR** Tilburg CentER for Economic Research Discussion Paper: 9796; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 15. **PR** no charge. **JE** C52, C63. **KW** Classification. Error Estimation. Monotonicity. Finance. Neural Network Models.

AB Feed forward neural networks receive a growing attention as a data modeling tool in economic classification problems. It is well-known that controlling the design of a neural network can be cumbersome. Inaccuracies may lead to a manifold of problems in the application such as higher errors due to local optima, overfitting and ill-conditioning of the network, especially when the number of observations is small. In this paper we provide a method to overcome these difficulties by regulating the flexibility of the network and by rendering measures for validating the final network. In particular a method is proposed to equilibrate the number of hidden neurons and the value of the weight decay parameter based on 5 and 10-fold cross-validation. In the validation process the performance of the neural network is compared with a linear model with the same input variable. The degree of monotonicity with respect of such explanatory variable is calculated by numerical differentiation. The outcomes of this analysis is compared to what is expected from economic theory. Furthermore we propose a scheme for the application of monotonic neural networks to problems where monotonicity with respect to the explanatory variables is known a priori. The methods are illustrated in two case studies.

Das, Marcel

PD April 1997. **TI** How Certain are Dutch Households About Future Income? An Empirical Analysis. **AU** Das, Marcel; Donkers, Bas. **AA** CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9738.; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 29. **PR** no charge. **JE** C81, D12, D84. **KW** Subjective Information. Income Expectations. Income Uncertainty.

AB The growing literature on precautionary saving clearly indicates the need for measurement of income uncertainty. In this paper we empirically analyzed subjective income uncertainty in the Netherlands. Data come from the Dutch VSB panel. We measure income uncertainty directly by asking questions on expected household income in the next twelve months. First, we describe our data and compare a measure of income uncertainty with corresponding studies conducted in the U.S. and Italy. Second, we investigate the relationship between the measure of income uncertainty and some household characteristics. Controlling for information on expected changes, we find strong relationships between labor-market characteristics and the subjective income uncertainty as reported by the heads of households.

PD May 1997. **TI** Comparing Predictions and Outcomes: Theory and Application to Income Changes. **AU** Das, Marcel; Dominitz, Jeff; van Soest, Arthur. **AA** Das and van Soest: CentER for Economic Research and Tilburg University. Dominitz: California Institute of Technology. **SR** Tilburg CentER for Economic Research Discussion Paper: 9745; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 27. **PR** no charge. **JE** C52, C53, D12. **KW** Predictions. Categorical Data. Loss Function. Income Growth.

AB Household surveys often illicit respondents' intentions or predictions of future outcomes. The survey questions may ask respondents to choose among a selection of (ordered) response categories. If panel data or repeated cross-sections are available, predictions may be compared with realized outcomes. The categorical nature of the predictions data, however, complicates this comparison. Generalizing previous findings on binary intentions data, we derive bounds on features of the empirical distribution of realized outcomes under the best case hypothesis that respondents have rational expectations and that reported expectations are best predictions of future outcomes. These bounds are shown to depend on the assumed model of how respondents form their best prediction when forced to choose among (ordered) categories. An application to data on income change expectations and realized income changes illustrates how alternative response models may be used to test the best case hypothesis.

Das, Sanjiv Ranjan

PD January 1997. **TI** Auction Theory: A Summary with Applications to Treasury Markets. **AU** Das, Sanjiv Ranjan; Sundaram, Rangarajan K. **AA** Das: Harvard University and National Bureau of Economic Research. Sundaram: New York University. **SR** National Bureau of Economic Research Working Paper: 5873; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 32. **PR** \$5.00. **JE** C72, D44, G14. **KW** Asset Pricing. Auctions. Noncooperative Games.

AB This review paper describes auction concepts, and provides a summary of the theory in this area, particularly as it relates to Treasury auctions.

Davis, Steven J.

PD March 1997. **TI** Oil Shocks, Military Spending, and Other Driving Forces. **AU** Davis, Steven J.; Loungani, Prakash; Mahidhara, Ramamohan. **AA** Davis: University of Chicago and National Bureau of Economic Research.

Loungani: Federal Reserve Board. Mahidhara: Amoco Corporation. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 578; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us. **PG** 63. **PR** no charge. **JE** E31, H56, Q41. **KW** Regional Cycles. Oil Shocks. Defense Expenditures. Military Bases. Unemployment.

AB We quantify the contribution of various driving forces to state-level movements in unemployment rates and employment growth from 1956 to 1992. Our story of regional fluctuations in the U.S. economy has a large cast of players -- including government contract awards and the basing of military personnel -- but oil price shocks have been the leading actor since 1973. Beyond the magnitude and abruptness of oil price movements, the explanation for their pronounced regional effects has three essential elements: (I) regions differ in industry mix, (II) industries differ in sensitivity to movements in the relative price of oil, and (III) the reallocation of productive factors across industries and regions is costly and time-consuming. Our study provides estimates of the costs of creating regional jobs and reducing regional unemployment through the awarding of military contracts. We find asymmetric unemployment responses to positive and negative regional shocks. Negative shocks -- whether involving increases in oil prices, or scaling back of contract awards and military bases -- have a greater impact than equal-sized positive shocks.

de Groot, Henri L. F.

TI Productivity and Unemployment in a Two-Country Model with Endogenous Growth. **AU** van Shaik, Anton B. T. M.; de Groot, Henri L. F.

PD June 1997. **TI** Optimal Product Variety, Scale Effects, and Growth. **AU** de Groot, Henri L. F.; Nahujs, Richard. **AA** CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9754; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 25. **PR** no charge. **JE** D43, D60, O41. **KW** Endogenous Growth. Monopolistic Competition. Returns to Variety. Returns to Scale. Social Welfare.

AB We analyze the social optimality of growth and product variety in a model of endogenous growth. The model contains two sectors, one assembly sector producing a homogenous consumption good, and one intermediate goods sector producing a differential input used in the assembly sector. Growth results from R&D performed by firms in the intermediate goods sector aimed at quality improvement. We disentangle three effects associated with increased variety, namely (i) a productivity effect, (ii) a business stealing effect, and (iii) a growth effect. The market provides too little variety and suboptimally high growth if the productivity effect of variety is large relative to the market power of intermediate goods producers. If varieties are not productive, the market provides too low a rate of growth, whereas variety may be too low as well.

de Janvry, Alain

TI Land Allocation Under Dual Individual-Collective Use in Mexico. **AU** McCarthy, Nancy; de Janvry, Alain; Sadoulet, Elisabeth.

PD January 1998. **TI** Endogenous Provision and Appropriation in the Commons. **AU** de Janvry, Alain; McCarthy, Nancy; Sadoulet, Elisabeth. **AA** de Janvry and Sadoulet: University of California, Berkeley. McCarthy: International Livestock Research Institute and International Food Policy Research Institute. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 844; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 17. **PR** \$5.00 Domestic; \$10.00 International Surface Rate; not available after publication. **JE** R14. **KW** Common Property. Cooperation.

AB In this paper, we develop a model explaining jointly the incentives to provide for and to appropriate from a common property resource. In the model, provision is non-cooperative while appropriation can be cooperative, but the quality of cooperation in appropriation is endogenous in response to the costs of deterring incentives to defect. We have solved this problem as though there were two separate decision-makers, reacting to each others' decisions: individual community members decide on provision in response to the quality of cooperation in appropriation; and cooperation in appropriation is determined in response to aggregate provision. This has led us to identifying the role of exogenous variables such as community size, quality of natural resources, and heterogeneity of membership on the joint equilibrium between provision and appropriation. We see that the resulting levels of provision and appropriation differ from those predicted from separate decisions.

TI Family and Community Networks in Mexico-US Migration. **AU** Winters, Paul; de Janvry, Alain; Sadoulet, Elisabeth.

TI Why Do Migrants Remit? An Analysis for the Dominican Sierra. **AU** de la Briere, Benedicte; de Janvry, Alain; Lambert, Sylvie; Sadoulet, Elisabeth.

TI Localized and Incomplete Mutual Insurance. **AU** Murgai, Rinku; Winters, Paul; Sadoulet, Elisabeth; de Janvry, Alain.

PD June 1998. **TI** Rural Development and Rural Policy. **AU** de Janvry, Alain; Murgai, Rinku; Sadoulet, Elisabeth. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 849; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 43. **PR** \$10.75 Domestic; \$21.50 International Surface Rate; not available after publication. **JE** O18, Q18. **KW** Rural Development. Agricultural Policy. Economic Policy. **AB** not available.

TI Common Pool Resource Appropriation Under Costly Cooperation. **AU** McCarthy, Nancy; Sadoulet, Elisabeth; de Janvry, Alain.

De Jong, Frank

PD January 1997. **TI** Exchange Rate Target Zones: A New Approach. **AU** De Jong, Frank; Drost, Feike C.; Werker, Bas J. M. **AA** De Jong and Drost: Tilburg University. Werker: UniversiteLibre de Bruxelles and Tilburg

University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9704; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 35. **PR** no charge. **JE** F31, G13. **KW** Exchange Rates. Target Zones. Currency Option Pricing.

AB We propose a new model for an exchange rate target zone that captures most stylized facts from the existing target zone models while remaining analytically tractable. The model is based on a modified two-limit version of the Cox, Ingersoll, and Ross (1985) model. In the model the exchange rate is kept within the band because the variance decreases as the exchange rate approaches the upper or lower limits of the band. We also consider an extension of the model with parity adjustments, which are modeled as Poisson jumps. Estimation of the model is by GMM based on conditional moments. We derive prices of currency options in our model, assuming that realignment jump risk is idiosyncratic. Throughout, we apply the theory to EMS exchange rate data. We show that, after the EMS crisis of 1993, currencies remain in an implicit target zone which is narrower than the officially announced target zones.

de Kok, Ton

TI The Optimal Number of Suppliers in an (s,Q) Inventory System with Order Splitting. **AU** Janssen, Fred; de Kok, Ton.

TI The Fill Rate Service Measure in an (s,Q) Inventory System with Order Splitting. **AU** Janssen, Fred; de Kok, Ton.

de la Briere, Benedicte

PD June 1998. **TI** Why Do Migrants Remit? An Analysis for the Dominican Sierra. **AU** de la Briere, Benedicte; de Janvry, Alain; Lambert, Sylvie; Sadoulet, Elisabeth. **AA** de Janvry and Sadoulet: University of California, Berkeley. de la Briere: International Food Policy Research Institute. Lambert: Institut National de la Recherche Agronomique. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 847; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 26. **PR** \$6.50 Domestic; \$13.00 International Surface Rate; not available after publication. **JE** F22. **KW** Migration. Remittances. Insurance. Inheritance.

AB Two contrasting hypotheses about what determines remittance sent by Dominican migrants to their rural parents in the Sierra are tested: (a) an insurance contract taken by parents with their migrant children and (b) an investment by migrants in potential bequests. Results show that remittances from male and young migrants follow a pattern consistent with investment. In contrast, female migrants play the role of insurers. The gender composition of migrants in the household affects these motivations since men with remitting brothers invest more while men with no other migrant in the household remit to insure their parents.

De Waegenare, Anja

PD May 1997. **TI** Choquet Integrals with Respect to Non-Monotonic Set Functions. **AU** De Waegenare, Anja; Wakker, Peter P. **AA** CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9744; CentER for Economic

Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 25. PR no charge. JE C60, D52, D81. KW Choquet Integral. Comonotonicity. Arbitrage. Time Preference.

AB This paper introduces the signed Choquet integral, i.e. a nonmonotonic generalization of the Choquet integral. Applications to welfare theory, multi-period optimization, and asset pricing are described.

de Zeeuw, Aart

TI Environmental Policy in an International Duopoly: An Analysis of Feedback Investment Strategies. AU Feenstra, Talitha; Kort, Peter; de Zeeuw, Aart.

Degryse, Hans

PD February 1997. **TI** Attribute Dependence and the Provision of Quality. AU Degryse, Hans; Irmen, Andreas. **AA** Degryse: Tilburg University and Center for Economic Policy Research. Irmen: Universite de Lausanne. **SR** Tilburg Center for Economic Research Discussion Paper: 9718; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 30. PR no charge. JE D21, L15. KW Competitive Positioning. Quality Standards. Product Differentiation.

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

Dellaert, B. G. C.

PD October 1997. **TI** Family Members' Projection of Each Other's Preference and Influence: A Two-Stage Conjoint Approach. AU Dellaert, B. G. C.; Prodigalidad, M.; Louviere, J. J. **AA** Dellaert: Center for Economic Research and Tilburg University. Prodigalidad and Louviere: University of Sydney. **SR** Tilburg Center for Economic Research Discussion Paper: 9793; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 24. PR no charge. JE C91, D12, M31. KW Conjoint Analysis. Family Preference. Preference Projections. Influence Measurement.

AB Two important sources of error that may limit the accuracy of individual family members' projections of joint family preferences are: (i) misperceptions of other members' preferences, and (ii) misperceptions of other members' influence in joint family evaluations. We propose a two-stage conjoint approach to study these potential errors. Stage one compares family members' projections of each other's preferences to members self-reported preferences. Stage two compares family members' projections of each other's

influence to observed influence in joint family preferences. An empirical illustration shows that family members are relatively poor predictors of preference, but fairly accurate predictors of influence, in the area of family holiday preferences.

PD October 1997. **TI** Investigating Consumers' Tendency to Combine Multiple Shopping Purposes and Destinations. AU Dellaert, B. G. C.; Arentze, Bierlaire, M. T.; Borgers, A.; Timmermans, H. **AA** Dellaert: Center for Economic Research and Tilburg University. Arentze, Borgers, and Timmermans: Eindhoven University of Technology. Bierlaire: Massachusetts Institute of Technology. **SR** Tilburg Center for Economic Research Discussion Paper: 9794; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 43. PR no charge. JE D12, L81, M31, R15. KW Conjoint Analysis. Store Choice. Retailing. Multipurpose Shopping.

AB Due to the increasing time pressure that they face, many consumers are becoming more concerned about the efficiency of their shopping patterns. Retailers have recognized this trend, have improved shopping convenience by offering greater variety in product categories and making it easier for consumers to combine visits to multiple stores. However, little is known about how consumers improve the efficiency of their shopping trips, or how changes in retail supply affect the way in which consumers combine multiple purposes and destinations. Building on previous work in consumer shopping trip modeling and conjoint design theory, this paper introduces a choice-based conjoint approach to studying and modeling this phenomenon. The approach is illustrated in a case study which investigated the tendency of Dutch shoppers to combine grocery, drugstore and clothing purchases across multiple shopping destinations. It was observed that the tendency of consumers to combine purchases differed from category to category and also depend on category availability. In general, consumers combined considerably less purchases than could be expected if their shopping trip planning were based purely on travel cost minimization.

deng, Frank

PD September 1997. **TI** Time-Series and Cross-Section Information in Affine Term Structure Models. **AA** Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9786; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 46. PR no charge. JE C33, E43. KW Term Structure. Panel Data. Kalman Filter.

AB In this paper we provide an empirical analysis of the term structure of interest rates using the affine class of term structure models introduced by Duffie and Kan. We estimate these models by combining time-series and cross-section information in a theoretically consistent way. In the estimation we use an exact discretization of the continuous time factor process and allow for a general measurement error structure. We provide evidence that at least two correlated factors are necessary to describe the term structure. The generalized CIR specification is close to the most general two-factor affine model and is preferred over the Vasicek model. However, there is some evidence that a two factor affine model is misspecified.

Diao, X.

PD January 1998. **TI** How Fiscal Mis-Management May Impede Trade Reform: Lessons From an Intertemporal Multi-Sector General Equilibrium Model for Turkey. **AU** Diao, X.; Roe, T. L.; Yelden, A. E. **AA** Diao and Roe: University of Minnesota. Yelden: Bilkent University. **SR** University of Minnesota Economic Development Center Bulletin: 98/01; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 31. **PR** no charge. **JE** C68, D58, E62, H63, O41, O53. **KW** General Equilibrium. Trade Liberalization. Fiscal Economics. Debt Management. Turkey. **AB** The authors utilize a multi-sector general equilibrium model based on intertemporally optimizing agents to study issues of trade liberalization and fiscal adjustments in the context of the Turkish economy. A key feature of the model is its explicit recognition of the distortionary consequences of excessive borrowing requirements of the public sector through increased domestic interest costs. The model suggests that the postponement of adjustment of growing public debt and fiscal imbalances could be detrimental; and that in the absence of coordinated fiscal reforms, the welfare gains expected from trade liberalization may significantly be negated.

Dolado, Juan J.

PD August 1997. **TI** Spanish Unemployment and Inflation Persistence: Are There Phillips Trade-Offs? **AU** Dolado, Juan J.; Lopez-Salido, J. David; Vega, Juan Luis. **AA** Dolado: Univ. Carlos III de Madrid; Lopez-Salido: Banco de Espana; Vega: European Monetary Institute. **SR** Banco de Espana. Servicio de Estudios. Documento de Trabajo: 9712; Banco de Espana. Seccion de Publicaciones. Negociado de Distribucion y Gestion. Alcala 50. 28104 Madrid. Website: www.bde.es. **PG** 21. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** E31, J64. **KW** Inflation. Unemployment.

AB This paper studies the joint behavior of inflation and unemployment in Spain over the period 1964-1995. We analyze the implications both of full hysteresis in unemployment and high inflation persistence for inference regarding dynamic Phillips trade-offs and sacrifice ratios in the Spanish economy in response to a demand shock. We organize our empirical approach as a structural but eclectic one. In doing so, we use a bivariate structural VAR to identify demand and supply shocks. Our eclecticism comes from using three alternative just-identifying outlines, giving rise to alternative interpretations of the unemployment-inflation dynamics. Our results indicate that for a wide range of plausible identifying assumptions it is possible to identify a stable long-run Phillips trade-off. Nonetheless, augmenting the bivariate VAR with a third variable (public expenditure) to disentangling monetary from "non-monetary" shocks indicate that the trade-off may be transitory rather than permanent.

Dominitz, Jeff

TI Comparing Predictions and Outcomes: Theory and Application to Income Changes. **AU** Das, Marcel; Dominitz, Jeff; van Soest, Arthur.

Domowitz, Ian

TI Liquidity-Corrected Variance Ratios and the Effect of Foreign Equity Ownership on Information in an Emerging

Market. **AU** Coppejans, Mark; Domowitz, Ian.

TI Automated Trade Execution and Open Outcry Trading: A First Look at the GLOBEX Trading System. **AU** Coppejans, Mark; Domowitz, Ian.

Donkers, Bas

TI How Certain are Dutch Households About Future Income? An Empirical Analysis. **AU** Das, Marcel; Donkers, Bas.

PD July 1997. **TI** Subjective Measures of Household Preferences and Financial Decisions. **AU** Donkers, Bas; van Soest, Arthur. **AA** CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9770; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 36. **PR** no charge. **JE** C21, D12, D90. **KW** Risk Aversion. Time Preference. Housing. Financial Decision-Making.

AB In intertemporal models of household consumption of portfolio choice, household behavior depends on, for example, the household's rate of time preference, the rate of risk aversion, and the household's information set. In this paper we use a survey of Dutch households which contains direct subjective information on risk aversion and time preference and on interest in financial matters. We first describe these data and analyze to which extent they can be explained from household characteristics and household income. We then investigate whether these variables are related to households' finances including home ownership, mortgages and ownership of risky assets. Our results are broadly in accordance with economic theory.

Douven, Rudy C.

TI Local Strong d-Monotonicity of the Kalai-Smorodinsky and Nash Bargaining Solution. **AU** Engwerda, Jacob C.; Douven, Rudy C.

Drazen, Allan

PD January 1997. **TI** Towards a Political-Economic Theory of Domestic Debt. **AA** University of Maryland and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5890; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** F34, H62, H63. **KW** International Finance. Debt. Interest Rates. Saving. Deficit.

AB A political-economic model of the composition of government debt, that is, whether it is issued to domestic or foreign holders, is presented. The key determinant will be the political constraints on repudiation of foreign and domestic debt, which will determine the nature of the domestic political equilibrium. Economic and political factors determine the effective cost of borrowing at home or abroad, and with the ability to segment markets the government acts like a discriminating monopsonist in placing its debt. A country that expects to face a low effective foreign interest rate, reflecting the expectation that it will not be forced to repay its foreign debts in full, will be characterized by high government spending, a high government budget deficit, low domestic saving and thus a high trade balance deficit so that the domestic

economy will look mismanaged in terms of a number of macroeconomic indicators.

PD January 1997. **TI** Policy Signaling in the Open Economy: A Re-examination. **AA** University of Maryland and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5892; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** D82, E60, F41. **KW** Business Cycles. International Trade. International Finance. Asymmetric Information.

AB The standard model of signaling used in open economy macroeconomics concentrates on building a reputation when a policymaker's type is unknown. Observing tough policy leads market participants to raise the probability that a policymaker is tough, and therefore to expect tough policy in the future. This approach leaves unexplained a number of commonly observed occurrences, for example, toughness in defending an exchange rate leading to increased speculation against the currency. To explain many phenomena, this paper argues, more sophisticated signaling models are needed, models which include signaling of resources rather than preferences, policy affecting the environment in which signals are sent, and exogenous changes in the environment affecting the informativeness of signals. These models are explored and are shown to be able to explain a number of phenomena the standard reputational model cannot.

Drost, Feike C.

TI Exchange Rate Target Zones: A New Approach. **AU** De Jong, Frank; Drost, Feike C.; Werker, Bas J. M.

Dufwenberg, Martin

PD February 1997. **TI** Indirect Evolution Versus Strategic Delegation: A Comparison of Two Approaches to Explaining Economic Institutions. **AU** Dufwenberg, Martin; Guth, Werner. **AA** Dufwenberg: CentER for Economic Research, Tilburg University and Uppsala University. Guth: Humboldt University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9712; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 17. **PR** no charge. **JE** C72, D21, D43. **KW** Indirect Evolution. Strategic Delegation.

AB The two major methods of explaining economic institutions, namely by strategic choices or by (indirect) evolution, are compared for the case of a homogenous quadratic duopoly market. Sellers either can provide incentives for their agents to care for sales (amounts) or evolve as sellers who care for sales in addition to profits. Whereas strategic delegation does not change the market results as compared to the usual duopoly solution, indirect evolution causes a more competitive behavior. Thus the case at hand suffices to demonstrate the difference between the two approaches in explaining economic institutions.

PD March 1997. **TI** The Consistency Principle for Set-Valued Solutions and a New Direction for the Theory of Equilibrium Refinements. **AU** Dufwenberg, Martin; Norde, Henk; Reijniere, Hans; Tijs, Stef. **AA** Dufwenberg: CentER for Economic Research, Tilburg University and Uppsala University. Norde, Reijniere: CentER for Economic Research

and Tilburg University. Tijs: Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9734; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 23. **PR** no charge. **JE** C70. **KW** Consistency Principle. Equilibrium Refinements.

AB We extend the consistency principle for strategic games (Peleg and Tijs 1996) to apply to solutions which assign to each game a collection of product sets of strategies. Such solutions turn out to satisfy desirable properties that solutions assigning to each game a collection of strategy profiles lack. Our findings lead us to propose a new direction for the theory of equilibrium refinements.

Eberhart, Allan C.

PD February 1997. **TI** The Equity Performance of Firms Emerging from Bankruptcy. **AU** Eberhart, Allan C.; Altman, Edward I.; Aggarwal, Reena. **AA** Eberhart and Aggarwal: Georgetown University. Altman: New York University. **SR** New York University, Salomon Center Working Papers: S/97/04; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 24. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** G10, G32, G33. **KW** Bankruptcy. Stock Returns. Equity.

AB This study assesses the stock return performance of 131 firms emerging from Chapter 11 between 1980 and 1993. Though there are some important differences, a firm using equity upon emergence from bankruptcy is analogous to an initial public offering (IPO). In contrast to the IPO literature, the authors find significant evidence of underpricing in the long-term. They also investigate reasons for cross-sectional differences in the returns. For example, the authors find that there is a positive relationship between the willingness of institutional investors to accept equity in the emerging firm (in exchange for their old claim on the formerly bankrupt firm) and the subsequent long-term equity returns. The results provide an interesting contrast, but not a contradiction, to previous work in this area that has documented poor operating performance for firms emerging from Chapter 11.

Economides, Nicholas

PD April 1997. **TI** The Incentive For Non-Price Discrimination by an Input Monopolist. **AA** New York University and Stanford University. **SR** New York University, Salomon Center Working Papers: S/97/13; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 19. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** D42, L12, L22, L96. **KW** Monopoly. Discrimination. Vertical Integration.

AB This paper considers the incentive for non-price discrimination of a monopolist in an input market who also sells in an oligopoly downstream market through a subsidiary. Such a monopolist can raise the costs of the rivals to its subsidiary through discriminatory quality degradation. The authors find that the monopolist always, even when it is cost-disadvantaged, has the incentive to raise the costs of the rivals to its subsidiary in a discriminatory fashion, but does not have the incentive to raise costs to the whole downstream industry

including its subsidiary. Moreover, increasing rivals' costs nullifies the effects of traditional imputation floors, and prompts the creation of imputation floors that account for the artificial costs imposed on downstream rivals. The results of this paper raise concerns about the potentially anti-competitive effects of entry of local exchange carriers in long distance services.

Edwards, Sebastian

PD November 1996. **TI** The Chilean Pension Reform: A Pioneering Program. **AA** University of California, Los Angeles and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5811; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 35. **PR** \$5.00. **JE** G23, H55, L33, O22. **KW** Chile. Pension Systems. Privatization. Defined Contribution.

AB In the mid-1970's Chile initiated a deep market-oriented reform program aimed at opening up the economy, privatizing state owned enterprises and stabilizing the macroeconomy. Perhaps one of the most admired aspects of the Chilean program has been the reform of the pension system, which replaced an inefficient pay-as-you-go system with a privately administered defined contribution one. The purpose of this paper is to analyze the most salient aspects of the Chilean program and to evaluate its achievement to date. The paper provides a brief background of the Chilean reforms effort and deals with Chile's old pay- as -you-go system, including its degree of (in)efficiency, its distributive characteristics and its fiscal consequences. The functioning of the new privately managed system is discussed in detail, and the system's results up to date are evaluated. Finally, the analysis also deals with the reform's effect on labor markets and savings.

Eichengreen, Barry

TI Implications of the Great Depression for the Development of the International Monetary System. **AU** Bordo, Michael D.; Eichengreen, Barry.

Eijffinger, Sylvester C. W.

PD February 1997. **TI** Central Bank Independence: A Sensitivity Analysis. **AU** Eijffinger, Sylvester C. W.; Schaling, Eric; Hoerberichts, Marco. **AA** Eijffinger: CentER for Economic Research, Tilburg University and Humboldt University. Schaling: Bank of England. Hoerberichts: CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9710; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 15. **PR** no charge. **JE** E31, E58. **KW** Central Bank. Bank Independence. Inflation. Output Growth.

AB In this paper we investigate the empirical relationship between four measures of central bank independence and macroeconomic performance. We look at both the mean and the variance of output and inflation for twenty industrial countries (Australia, Austria, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom and the United States) for the period 1972-1992. The elasticity of inflation with respect to central bank independence is estimated and we calculate the fraction of the covariance between the mean and the variance of inflation that can be

explained by their common association with central bank independence. We check the robustness of our results by looking at four indices of central bank independence, two subperiods and by including control variables. We find that central bank independence lowers the mean and variance of inflation but has no effect on the mean and variance of output growth.

PD March 1997. **TI** The Advantage of Hiding Both Hands: Foreign Exchange Intervention, Ambiguity and Private Information. **AU** Eijffinger, Sylvester C. W.; Verhagen, Willem H. **AA** Eijffinger: CentER for Economic Research, Tilburg University, College of Europe and Humboldt University. Verhagen: CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9730; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 43. **PR** no charge. **JE** E58, F31, G51. **KW** Exchange Rate. Sterilized Intervention.

AB This paper analyzes a dynamic exchange rate policy game in which the central bank has private information about its short-term exchange rate target, on the one hand, and in which the market is faced with a certain degree of ambiguity concerning the actual intervention volume, on the other. Sterilized interventions are shown to derive their effectiveness from the fact that they transmit information about the short-term exchange rate target to the market. In this respect, we provide an explanation for the presumed inconsistency between intervention secrecy and the effectiveness of the signaling channel since our model predicts that interventions will be more effective on average if the central bank retains some degree of ambiguity. Moreover, it is also shown that sterilized interventions will not exert a lasting effect on the exchange rate. Finally, we have also investigated the extent to which some political and economic parameters determine the size of the intervention bias.

PD June 1997. **TI** Why Money Talks and Wealth Whispers: Monetary Uncertainty and Mystique. **AU** Eijffinger, Sylvester C. W.; Hoerberichts, Marco; Schaling, Eric. **AA** Eijffinger: CentER for Economic Research, Tilburg University, College of Europe and Humboldt University. Hoerberichts: CentER for Economic Research and Tilburg University. Schaling: Bank of England. **SR** Tilburg CentER for Economic Research Discussion Paper: 9747; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 18. **PR** no charge. **JE** E52, E58. **KW** Credibility. Flexibility. Uncertainty.

AB The paper analyzes the effect of monetary uncertainty on the inflationary bias and the variance of output and inflation. Monetary policy uncertainty is modeled as a shock to the central banker's preference for inflation stabilization relative to output stabilization that cannot be observed by the public. We find that the mean and variance of inflation increase with the variance of this preference shock. However, unlike other studies, we find that money uncertainty may very well have a positive effect on output stabilization and therefore also on society's welfare.

Ellichehausen, Gregory

PD December 1997. **TI** The Cost of Implementing Consumer Financial Regulations: An Analysis of Experience with the Truth in Savings Act. **AU** Ellichehausen, Gregory; Lowrey, Barbara R. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Staff Studies Paper: 170; Board of Governors of the Federal Reserve System, Economic Editing Section, Division of Research and Statistics, Washington, DC 20551. **PG** 17. **PR** no charge. **JE** Not available. **KW** Not available.

AB Not available.

PD April 1998. **TI** The Cost of Bank Regulation: A Review of the Evidence. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Staff Studies Paper: 171; Board of Governors of the Federal Reserve System, Economic Editing Section, Division of Research and Statistics, Washington, DC 20551. **PG** 35. **PR** no charge. **JE** Not available. **KW** Not available.

AB Not available.

Ellison, Glenn

TI Are Some Mutual Fund Managers Better Than Others? Cross-Sectional Patterns in Behavior and Performance. **AU** Chevalier, Judith; Ellison, Glenn.

Elston, Julie

TI Financial Factors and Investment in Belgium, France, Germany and the UK: A Comparison Using Company Panel Data. **AU** Bond, Stephen; Mairesse, Jacques; Elston, Julie; Mulkay, Benoit.

Engel, Charles

PD September 1997. **TI** Intra-National, Intra-Continental, and Intra-Planetary PPP. **AU** Engel, Charles; Hendrickson, Michael K.; Rogers, John H. **AA** Engel and Hendrickson: University of Washington. Rogers: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 589; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us. **PG** 32. **PR** no charge. **JE** F31. **KW** Purchasing Power Parity. Unit Roots. **AB** This paper presents a general framework to address several issues that have arisen in recent work that investigates purchasing power parity (PPP) and other inter-regional relative price movements: (1) How can we model real exchange rate movements in a consistent manner, so that our model for the real exchange rate for country B relative to country C is commensurate with our models for country A/ country B and country A/ country C real exchange rates? For example, can things be modeled so that our tests do not depend on the "base country"? (2) How should we handle correlation across real exchange rates in panel tests of PPP? (3) Are speeds of adjustment toward PPP different for intra-national, cross-national and cross-continental real exchange rates? (4) Is the innovation variance different for intra-national, cross-national and cross-continental real exchange rates; and, if so, how does that influence how we model and test PPP?

Engen, Eric M.

PD November 1996. **TI** Taxation and Economic Growth. **AU** Engen, Eric M.; Skinner, Jonathon. **AA** Engen: Federal Reserve Board and National Bureau of Economic Research. Skinner: Dartmouth College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5826; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 47. **PR** \$5.00. **JE** E62, H20, O41. **KW** Taxation. Growth. Labor Supply. Investment. Productivity.

AB Tax reforms are sometimes touted to have strong macroeconomic growth effects. The authors consider the impact of a major tax reform on the long-term growth rates of the U.S. economy using three approaches. The first approach is to examine the historical record of the U.S. economy to evaluate whether tax cuts have been associated with economic growth. The second is to consider the evidence on taxation and growth for a large sample of countries. And finally, they use evidence from micro-level studies of labor supply, investment demand, and productivity growth. The authors' results suggest modest effects, on the order of 0.2 to 0.3 percentage point differences in growth rates in response to a major tax reform that changes all marginal tax rates by 5 percentage points and average tax rates by 2.5 percentage points. Nevertheless, even such small effects can have a large cumulative impact on living standards.

Engle, Robert F.

PD November 1996. **TI** The Econometrics of Ultra-High Frequency Data. **AA** University of California, San Diego and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5816; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 18. **PR** \$5.00. **JE** C13, C14, C40. **KW** High Frequency Data. Marked Point. Transactions Data. Semiparametric Methods.

AB Ultra-high frequency data are complete transactions data which inherently arrive at random times. Marked point processes provide a theoretical framework for analysis of such data sets. The ACD model developed by Engle and Russell (1995) is then applied to IBM transactions data to develop semi-parametric hazard estimates and measures of instantaneous conditional variances. The variances are negatively influenced by surprisingly long durations as suggested by some of the market micro-structure literature.

Engsted, Tom

PD January 1997. **TI** Testing for Multicointegration. **AU** Engsted, Tom; Gonzalo, Jesus; Haldrup, Niels. **AA** Engsted and Haldrup: University of Aarhus. Gonzalo: University of Carlos III. **SR** Aarhus Department of Economics Working Paper: 1997/01; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.cco.aau.dk/afn. **PG** 14. **PR** no charge. **JE** C12, C13, C22. **KW** Cointegration. Multicointegration.

AB We suggest how to define the multicointegration model of Granger and Lee (1990) in terms of an I(2) system and subsequently propose a one-step procedure for estimation and inference which will have favorable statistical properties compared to the two-step procedure suggested by Granger and Lee. With respect to the single equation residual based

cointegration procedure for I(2) systems we tabulate new critical values that are necessary to accommodate the presence of deterministic components.

PD October 1997. **TI** Multicointegration in Stock-Flow Models. **AU** Engsted, Tom; Haldrup, Niels. **AA** University of Aarhus. **SR** Aarhus Department of Economics Working Paper: 1997/18; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. **PG** 20. **PR** no charge. **JE** C12, C13, C22, C32, C51. **KW** Cointegration. Multicointegration. I(2) Processes. Housing Construction.

AB Multicointegration, in the sense of Granger and Lee (1990), frequently occurs in models of stock-flow adjustment and implies cointegration amongst I(2) variables and their differences (polynomial cointegration). The purpose of this article is two-fold. First, we demonstrate that based on a multicointegrated vector autoregression (VAR) two equivalent error correction model (ECM) representations can be derived; the first is expressed in terms of adjustments in the flows of the variables (the standard I(2) ECM), and the second is expressed in terms of adjustments in both the stocks and the flows. Secondly, we apply I(2) estimation and testing procedures for multicointegrated time series to analyze data for U.S. housing construction. We find that stocks of housing units started and completed exhibit polynomial cointegration (and hence the flows are multicointegrated) and the associated ECM's are estimated. Lee (1992, 1996) also found multicointegration in this data set but without explicitly exploiting the I(2) property.

Engwerda, Jacob C.

PD May 1997. **TI** Local Strong d-Monotonicity of the Kalai-Smorodinsky and Nash Bargaining Solution. **AU** Engwerda, Jacob C.; Douven, Rudy C. **AA** Engwerda: Tilburg University. Douven: CPB. **SR** Tilburg Center for Economic Research Discussion Paper: 9782; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 22. **PR** no charge. **JE** C78. **KW** Bargaining Solution. Disagreement Point. Pareto Frontier.

AB In this paper we investigate how the Kalai-Smorodinsky and Nash bargaining solution respond to a change in the disagreement point d . We call a bargaining solution locally strong d -monotonic at the disagreement point d if an infinitesimal increase of d , while for each j does not equal to i , $d_{sub j}$ remains constant, then agent i is the only one who's payoff increases. We present sufficient conditions for the Pareto frontier under which the Kalai-Smorodinsky and Nash bargaining solution satisfy this property. It turns out that in general the local strong d -monotonicity property of the Kalai-Smorodinsky solution is a stronger requirement than that of the Nash bargaining solution.

PD June 1997. **TI** Computational Aspects of the Open-Loop Nash Equilibrium in Linear Quadratic Games. **AA** Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9783; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 16. **PR** no charge. **JE** C70. **KW** Differential Games. Nash Equilibria. Solvability Conditions. Riccati Equations.

AB In this paper we consider open-loop Nash equilibria of

the linear-quadratic differential game. In Engwerda (1997) both necessary and sufficient conditions for existence of a solution for as well the finite-planning horizon case as well the infinite-planning horizon case were present. Here we will consider computational aspects of this problem. In particular we consider convergence aspects of the finite-planning horizon solution if the planning horizon expands. An algorithm is presented to calculate all equilibria of the infinite-planning horizon case. Furthermore sufficient conditions on the system parameters are presented, which guarantee the existence of a unique solution for both the finite as the infinite horizon problem.

PD October 1997. **TI** The (In)Finite Horizon Open-Loop Nash LQ Game: An Application to EMU. **AU** Engwerda, Jacob C.; van Aarle, B.; Plasmans, J. E. J. **AA** Engwerda: Tilburg University. Aarle: University of Nijmegen and University of Antwerp. Plasmans: Tilburg University and University of Antwerp. **SR** Tilburg Center for Economic Research Discussion Paper: 9784; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 28. **PR** no charge. **JE** C70. **KW** Linear-Quadratic Games. Nash Equilibrium. Solvability Conditions. Riccati Equations.

AB In this paper we consider a generalization of the linear-quadratic differential game studied in Engwerda (1997). We show that the theoretical results obtained in that paper w.r.t. existence of open-loop Nash equilibria for the finite-planning horizon, the infinite-planning horizon as well as some convergence properties can be straightforwardly generalized. Particular attention is paid to computational aspects. To motivate the study of this generalized game, we show how the results can be applied and study macroeconomic stabilization in the Economic and Monetary Union (EMU).

Eom, Young Ho

TI No-Arbitrage Option Pricing: New Evidence on the Validity of the Martingale Property. **AU** Brenner, Menachem; Eom, Young Ho.

Epple, Dennis

PD February 1997. **TI** Estimating Equilibrium Models of Local Jurisdictions. **AU** Epple, Dennis; Sieg, Holger. **AA** Epple: Carnegie Mellon University. Sieg: Duke University. **SR** Duke University Department of Economics Working Papers: 97/05; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 39. **PR** no charge. **JE** C30, D31, H30, H70, R13. **KW** Tiebout Hypothesis. Spatial Models. Local Jurisdictions. Minimum Distance. Income Distribution.

AB Research over the past several years has led to development of models characterizing equilibrium in a system of local jurisdictions. An important insight from these models is that plausible single-crossing assumptions about preferences generate strong predictions about the equilibrium distribution of households across communities. To date, these predictions have not been subjected to formal empirical tests. The purpose of this paper is to provide an integrated approach for testing predictions from this class of models. This paper focuses primarily on the locational equilibrium implied by these models. In particular, the authors focus on predictions about the distribution of households by income across communities. The central idea of the estimation strategy is to match the observed

quantiles of the income distributions with those predicted by the model. By drawing inferences from a structural general equilibrium model, the approach of this paper offers a unified treatment of theory and empirical testing.

Erceg, Christopher J.

PD September 1997. **TI** National Wage Rigidities and the Propagation of Monetary Disturbances. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 590; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us. **PG** 54. **PR** no charge. **JE** E31, J31. **KW** Contract Multiplier. Sticky Prices.

AB Recent research has challenged the ability of sticky price general equilibrium models to generate a contract multiplier, i.e., an effect of a monetary innovation on output that extends beyond the contract interval. We show that a simple dynamic general equilibrium model that includes "Taylor-style" (1980) wage and price contracts can account for a substantial contract multiplier under various assumptions about the structure of the capital market. Most interestingly, our results do not rely on a high intertemporal labor supply elasticity or elastic supply of capital: our preference specification is standard (logarithmic), and we can account for a strong contract multiplier even when the aggregate capital stock is fixed. Finally, our analysis highlights the importance of the income elasticity of money demand in accounting for output persistence.

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

Estrella, Arturo

PD November 1996. **TI** Is There a Role for Monetary Aggregates in the Conduct of Monetary Policy? **AU** Estrella, Arturo; Mishkin, Frederic S. **AA** Federal Reserve Bank of New York and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5845; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 51. **PR** \$5.00. **JE** E32, E52. **KW** Economic Fluctuations. Growth. Monetary Economics. Germany.

AB The authors examine the potential role of monetary aggregates by attempting to use them as effectively as possible in the analysis of empirical relationships. They consider three possible roles: as information variables, as indicators of policy actions and as instruments in a policy rule. These require successively stronger and more stable relationships between the aggregates and the final policy targets. The authors' results show that in the United States since 1979, the monetary aggregates fall considerably short of those requirements, and results with German M3 are hardly more favorable. They also investigate whether empirical relationships are not reflective of causal relationships because of the use of these variables in counter cyclical policy. The results are reasonably consistent with that notion in the case of interest rates, but not in the case of the aggregates.

Euwals, Rob

PD March 1997. **TI** Testing the Predictive Value of Subjective Labor Supply Data. **AU** Euwals, Rob; Melnberg,

Bertrand; van Soest, Arthur. **AA** Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9725; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 43. **PR** no charge. **JE** C12, C14, J22. **KW** Labor Supply. Subjective Data. Hypothesis Testing. Nonparametric Methods.

AB Empirical implementation of labor supply theories is usually based on realized labor market behavior. This requires strong assumptions about the impact of labor demand. A possibility to avoid these assumptions is to make use of subjective data on desired labor supply. In this paper we investigate whether respondents' answers to survey questions on the desired number of working hours contain additional information on the preferences of the individuals. Using panel data for the Netherlands, we analyze whether deviations between desired hours and actual hours of work help to predict future job changes or changes in hours worked. We use parametric and recently developed nonparametric tests. The result suggests that subjective information on desired working hours are helpful in explaining female labor supply. For males the evidence is mixed.

PD June 1997. **TI** Hours Constraints Within and Between Jobs. **AA** Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9764; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 27. **PR** no charge. **JE** C20, J22, J60. **KW** Labor Supply. Hours Constraints. Job Mobility. Subjective Data.

AB In the empirical literature on labor supply, several models are developed to incorporate constraints on working hours. These models do not address the question to which extent working hours are constrained within and between jobs. In this paper I investigate the effect of individual changes in labor supply preferences on actual working hours. The availability of subjective information on the individual's preferred working hours gives direct measures on the degree of adjustment of working hours within and between jobs. I take the potential endogeneity of the observed changes in labor supply preferences into account by using instrumental variables techniques. Using the Dutch Socio Economic panel, I find for women who work in two consecutive years that the degree of adjustment of working hours within jobs is significantly smaller than between jobs. I also find that job mobility does not lead to complete adjustment in working hours, as the realized adjustment is significantly less than 100 percent of the preferred adjustment.

Evans, Charles L.

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

Fair, Ray C.

PD November 1997. **TI** Evaluating the Information Content and Money Making Ability of Forecasts from Exchange Rate Equations. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1168; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 29. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** F31. **KW** Exchange

Rates. Forecasting.

AB This paper evaluates a particular set of equations for the dollar/yen and dollar/mark exchange rates. The forecasts from the equations dominate both forecasts from the random walk model and forecasts using the forward rate. The results also suggest that money may be able to be made in the forward markets using the equations.

Fanelli, Luca

PD May 1997. **TI** Estimating Multi-Equational LQAC Models With I(1) Variables: A VAR Approach. **AA** Universita di Bologna. **SR** Aarhus Department of Economics Working Paper: 1997/07; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. **PG** 35. **PR** no charge. **JE** C10, C13, C32, C61, C62. **KW** Adjustment Costs. Cointegration. Rational Expectations.

AB This paper extends the existing literature on linear quadratic adjustment cost (LQAC) models under rational expectations to the inferential issues arising when: (i) agents optimize with respect to a vector of endogenous variables; (ii) the behavioral equations stemming from the agent's optimization problem are specified as "exact" rational expectations models; (iii) the stochastic processes involved are integrated of order one. We discuss estimation both in a "limited- information" and in a "full-information" framework. In the first case we show that consistent estimation of the structural parameters may be achieved by focusing on the open-form solution to the model, and implementing existing procedures. In the second case, by focusing on the unique and stable forward-looking solution to the model, we propose a likelihood-based inferential procedure in time domain. The key assumption is that agents form expectations through a cointegrated vector autoregression (CVAR) system representing the joint data generation process for both the endogenous and exogenous variables.

Farber, Henry S.

PD June 1997. **TI** The Changing Face of Job Loss in the United States, 1981-1995. **AA** Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 382; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 80. **PR** \$2.00. **JE** J63. **KW** Displacement. Job Loss. **AB** Not available.

PD July 1997. **TI** Trends in Long Term Employment in the United States, 1979-96. **AA** Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 384; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 39. **PR** \$1.50. **JE** E24, J23, J63. **KW** Long-Term Employment. Women. Labor Market. Turnover.

AB The author examines changes in the incidence of long-term employment in the United States using data from mobility supplements and pension and benefit supplements to the Current Population Survey (CPS) from 1979 through 1996. After controlling for demographic characteristics, the fraction of workers reporting more than ten and more than twenty years of tenure fell substantially after 1993 to its lowest level since 1979. This decline was concentrated among men, while long-term employment relationships became slightly more common among women. The decline in the incidence of long-term

employment relationships for all workers was not mirrored in an increase in incidence on lost jobs. Thus, the evidence is not consistent with the view that the decline in long-term employment relationships is the result of employers targeting long-term employees for layoff. In fact, the share of displaced men who are displaced from long-term employment relationships has declined since 1979.

PD July 1997. **TI** Job Creation in the United States: Good Jobs or Bad? **AA** Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 385; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 58. **PR** \$2.00. **JE** J23, J31, J33, J41. **KW** Employment. Real Wages. Part-Time Employment. Health Insurance. Job Creation.

AB In this study, the author defines new jobs operationally as worker- firm matches that have begun within the last year, and he investigates the extent to which the quality of new (low tenure) jobs relative to old (higher tenure) jobs has changed over the period from 1979-1996. The author considers three dimensions of quality: real wages, the rate of part-time employment, and the rate of coverage by employer-provided health insurance. The results are clearcut. Real hourly wages on new jobs have deteriorated slightly relative to wages on older jobs. There is no evidence of an increase in the rate of part-time employment on either new jobs or old jobs so that the quality of new jobs has not changed absolutely or relative to the quality of older jobs in this dimension. The quality of new jobs has deteriorated substantially for some workers in provision of employer-provided health insurance.

PD October 1997. **TI** Alternative Employment Arrangements as a Response to Job Loss. **AA** Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 391.; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 61. **PR** not available. **JE** J23, J62, J63, J64. **KW** Job Loss. Employment. Part-Time Employment.

AB The author examines the extent to which workers who lose jobs find work in alternative employment arrangements such as temporary work, part-time work, and independent contracting rather than as conventional full-time "regular" employees. The author finds that job losers are significantly more likely than non-losers to be in temporary jobs. There is also some evidence from matched data that the likelihood of temporary employment falls with time since job loss while the likelihood of "regular" employment increases with time since job loss. The author finds that job losers are less likely than non-losers to be either in regular jobs or self-employed subsequent to job loss. But job losers are more likely than non-losers to be employed part-time subsequent to job loss. There is also evidence that the likelihood of part-time employment falls with time since job loss.

PD January 1998. **TI** Has the Rate of Job Loss Increased in the Nineties? **AA** Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 394; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 14. **PR** \$1.00. **JE** J63. **KW** Displacement. Job Loss.

AB The author examines changes in the incidence of job loss between 1981 and 1995. The rate of job loss followed no cyclical pattern between 1981 and 1991, starting at a high level in the slack labor market of the early 1980's, falling during the economic expansion of the middle and late 1980's, and rising

during the weak labor market at the end of the 1980's and early 1990's. A puzzle is that the overall rate of job loss has increased in the 1990's despite the sustained expansion. The author then addresses the possibility that the elevated rates of job loss in the 1990's are a statistical artifact resulting from changes in the wording of key questions in the DWS in 1994 and 1996 exacerbating a problem of misclassification of some workers as displaced. Using additional data the author finds that the overall rate of job loss has not declined in the 1993-1995 time period.

Faust, Jon

PD December 1996. **TI** Theoretical Confidence Level Problems with Confidence Intervals for the Spectrum of a Time Series. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 575; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us. **PG** 12. **PR** no charge. **JE** C10, C32. **KW** Confidence Interval. Spectrum. Asymptotic.

AB Textbook approaches to forming asymptotically justified confidence intervals for the spectrum under very general assumptions were developed by the mid 1970's. This paper shows that under the textbook assumptions, the true confidence level for these intervals does not converge to the asymptotic level, and instead is fixed at zero in all sample sizes. The paper explores necessary conditions for solving this problem, most notably showing that under weak conditions, forming valid confidence intervals requires that one limit consideration to a finite-dimensional time series model.

PD March 1997. **TI** General-To-Specific Procedures for Fitting a Data-Admissible, Theory-Inspired, Congruent, Parsimonious, Encompassing, Weakly-Exogenous, Identified, Structural Model to the DGP: A Translation and Critique. **AU** Faust, Jon; Whiteman, Charles H. **AA** Faust: Board of Governors Federal Reserve System. Whiteman: University of Iowa. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 576; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us. **PG** 47. **PR** no charge. **JE** C51. **KW** Reduced Form. Identification. Instruments.

AB We characterize the LSE approach by its implications for reduced-form modeling and structural interpretations. Much of what has come to be associated with the LSE methodology involves the approach to fitting reduced forms, and can be thought of as a pragmatic solution to problems created by short samples plagued by serial correlation. The policy analysis one might be able to do with an LSE model on the other hand, hinges on structural identification arguments which do not meet the classic Cowles Commission standards, and is thus suspect.

Feenberg, Daniel R.

PD January 1997. **TI** Distributional Effects of Adopting a National Retail Sales Tax. **AU** Feenberg, Daniel R.; Poterba, James M.; Mitrusi, Andrew W. **AA** Feenberg and Mitrusi: National Bureau of Economic Research. Poterba: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5885; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138.

Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** H22, H23, H24. **KW** Public Economics. Taxation. Sales Tax. Consumption Tax.

AB This paper describes a new household-level data file based on merged information from the IRS Individual Tax File, the Current Population Survey, the National Medical Expenditure Survey, and the Consumer Expenditure Survey. This new file includes descriptive data on household income as well as consumption. The data file can be linked to the NBER TAXISM program and used to evaluate the distributional effects of changing the federal income tax code. The authors use this data file to analyze the long-run distributional effects of adopting a national retail sales tax that raises enough revenue to replace the current federal individual income tax and corporation income tax, as well as federal estate and gift taxes. Their results highlight the sensitivity of the change in distributional burdens to provisions such as lump sum transfers and to the choice between income and consumption as a basis for categorizing households in distribution tables.

Feenstra, Robert

PD January 1997. **TI** Business Groups and Trade in East Asia: Part I, Networked Equilibria. **AU** Feenstra, Robert; Huang, Deng-Shing; Hamilton, Gary G. **AA** Feenstra: University of California, Davis and National Bureau of Economic Research. Hung: Institute of Economics. Hamilton: University of Washington. **SR** National Bureau of Economic Research Working Paper: 5886; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 34. **PR** \$5.00. **JE** C70, D23, F14, L13, L22. **KW** International Trade. Investment. Cooperation. Business Groups. Industrial Organization.

AB The authors propose an economic model of business groups that allows for the cooperative behavior of groups of firms, where the number and size of each group is determined endogenously. In this framework, more than one configuration of groups can arise in equilibrium: several different types of business groups can occur, each of which is consistent with profit maximization and is stable. This means that the economic logic does not fully determine the industrial structure, leaving scope for political and sociological factors to have a lasting influence. In a companion paper, the authors argue that the differing structures of business groups found in South Korea, Taiwan and Japan fit the stylized results from the model, and contrast the impact of these groups on the product variety of their countries' exports to the United States.

PD January 1997. **TI** Business Groups and Trade in East Asia: Part 2, Product Variety. **AU** Feenstra, Robert; Yang, Maria; Hamilton, Gary G. **AA** Feenstra: University of California, Davis and National Bureau of Economic Research. Yang: Executive Yuan. Hamilton: University of Washington. **SR** National Bureau of Economic Research Working Paper: 5887; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 39. **PR** \$5.00. **JE** D23, D40, F14, L11, L22. **KW** International Trade. Market Structure. Product Variety. Vertical Integration.

AB The authors analyze the impact of market structure on the trade performance of South Korea, Taiwan and Japan. Korea has many large, vertically-integrated business groups known as chaebol, whereas business groups in Taiwan are smaller and more specialized in the production of intermediate inputs. The authors test the hypothesis that the greater vertical integration

in Korea results in less product variety than for Taiwan, constructing indexes of product variety and product mix in their exports to the United States. It is found that Taiwan tends to export a greater variety of products to the U.S. than Korea, and this holds across all industries. In addition, Taiwan exports relatively more high-priced intermediate inputs, whereas Korea exports relatively high-priced final goods. A comparison with Japan is also presented, and the authors find that Japan has greater product variety in its sales to the U.S. than either Taiwan or Korea.

Feenstra, Talitha

PD April 1997. **TI** Environmental Policy in an International Duopoly: An Analysis of Feedback Investment Strategies. **AU** Feenstra, Talitha; Kort, Peter; de Zeeuw, Aart. **AA** CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9743; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 31. **PR** no charge. **JE** C73, D92, Q48. **KW** Environmental Policy Competition, Duopoly, Differential Game.

AB This paper discusses environmental policy instruments in a differential-game model of international trade with oligopolistic competition. Strategic interactions occur if firms use feedback strategies and therefore react on decisions of their competitor. Eventually this harms firm profits, because all firms act strategically. A firm reacts differently if its competitor is subject to an environmental standard than if it is subject to an environmental tax. Under open-loop investment strategies and feedback strategies of energy use, environmental taxes always give rise to more investment for strategic reasons than standards. This confirms results of multistage static models of the same problem. The new result is that under feedback investment strategies the reverse can be the case.

Feinstein, Leon

PD March 1997. **TI** Attainment in Secondary School. **AU** Feinstein, Leon; Symons, James. **AA** University College London and London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 341; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 18. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** I20, I24, O13. **KW** Schooling Attainment. Peer Groups. Parental Interest.

AB This paper studies attainment in secondary schools. We estimate an education production function in which attainment depends upon parental inputs, peer group inputs and schooling inputs. We find that the most powerful parental input is parental interest in children, as assessed by teachers. We find a strong peer group effect. The school pupil-teacher ratio does not enter significantly. The only strongly endogenous variable is initial attainment. We argue that this is due to measurement error. There is some evidence that parental interest is endogenous but we do not find peer group variables to be so.

Feldstein, Martin

PD December 1996. **TI** How Big Should Government Be? **AA** National Bureau of Economic Research.

SR National Bureau of Economic Research Working Paper: 5868; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** \$5.00. **JE** E62, H20, J22. **KW** Public Economics. Deadweight Burden. Taxation. Government Size. Labor Supply.

AB The appropriate size and role of government depends on the deadweight burden caused by incremental transfers of funds from the private sector. The magnitude of that burden depends on the increase in tax rates required to raise incremental revenue and on the deadweight loss that results from higher tax rates. The first part of this paper explains why the official method of revenue estimation used by the Treasury and the Congress underestimates the tax rate increases required to raise additional revenue. The second part of the paper emphasizes that the deadweight burden caused by a tax rate increase depends not just on the response of labor force participation and average working hours but also on other dimensions of labor supply, on the forms in which compensation is paid, on the individuals' spending on tax favored forms of consumption, and on the intertemporal allocation of consumption.

Fernald, John G.

PD October 1997. **TI** Roads to Prosperity? Assessing the Link Between Public Capital and Productivity. **AA** Federal Reserve Board. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 592; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us. **PG** 38. **PR** no charge. **JE** H54. **KW** Prosperity. Public Capital. Productivity. Infrastructure.

AB At a macroeconomic level, infrastructure and productivity are positively correlated in the United States and other countries. However, it remains unclear whether this correlation reflects causation, and if so, whether causation runs from infrastructure to productivity, or the reverse. This paper focuses on roads, and finds that vehicle-intensive industries benefit disproportionately from road-building: when road growth changes, productivity growth changes more in industries that are more vehicle intensive. These results suggest that causation runs from infrastructure to productivity. However, there is no evidence that at the margin, roads offer an above-average return; road-building in essence offered a one-time boost to the level of productivity in the 1950's and 1960's. Finally, it appears that congestion significantly affects road-services at the margin, although congestion does not appear important before 1973.

TI Aggregate Productivity and Aggregate Technology. **AU** Basu, Susanto; Fernald, John G.

Fernandez, Carmen

PD January 1997. **TI** On the Dangers of Modelling Through Continuous Distributions: A Bayesian Perspective. **AU** Fernandez, Carmen; Steel, Mark F. J. **AA** CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9705; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 24. **PR** no charge. **JE** C11. **KW** Coarse Data. Posterior Existence. Location-Scale Model. Rounding. Skewness. Student-T.

AB We point out that Bayesian inference on the basis of a given sample is not always possible with continuous sampling models, even under a proper prior. The reason for this paradoxical situation is explained, and its empirical relevance is linked to coarse gathering of data, such as rounding. A solution, inspired by the way observations are recorded, is proposed. Use of a Gibbs sampler makes the solution practically feasible. The case of independent sampling from (possibly skewed) scale mixtures of Normals is analyzed in detail for a location-scale model with a commonly used noninformative prior. For student-t sampling with unrestricted degrees of freedom the usual inference, based on point observations, is shown to be precluded whenever the sample contains repeated observations. We show that Bayesian inference based on set observations, however, is possible and illustrate this by an application to a skewed data set of stock returns.

PD January 1997. **TI** Multivariate Student-T Regression Models: Pitfalls and Inference. **AU** Fernandez, Carmen; Steel, Mark F. J. **AA** CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9708; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 28. **PR** no charge. **JE** C11. **KW** Bayesian Inference. Coarse Data. Continuous Distribution. Maximum Likelihood. Missing Data. **AB** We consider likelihood-based inference from multivariate regression models with independent Student-T errors. Some very intriguing pitfalls of both Bayesian and classical methods on the basis of point observations are uncovered. Bayesian inference may be precluded as a consequence of the coarse nature of the data. Global maximization of the likelihood function is a vacuous exercise since the likelihood function is unbounded as we tend to the boundary of the parameter space. A Bayesian analysis on the basis of set observations is proposed and illustrated by several examples.

Fershtman, Chaim

PD March 1997. **TI** Strategic Delegation: An Experiment. **AU** Fershtman, Chaim; Gneezy, Uri. **AA** Fershtman: CentER for Economic Research, Tilburg University and Tel Aviv University. Gneezy: CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9726; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 38. **PR** no charge. **JE** C70. **KW** Strategic Delegation. Ultimatum Game.

AB This paper examines the effects of strategic delegation in a simple ultimatum game experiment. Our main concern is to examine the way delegation alter the way players think about the game and play it. Specifically, we show that a delegate's offer is more easily accepted by the responder as he is less keen to punish both the principle and the agent. We also show that unobserved delegation by the responder lowers his share as his agent is perceived to be more willing to accept tough offers. These effects identify an additional explanation to the delegation phenomena.

Ferson, Wayne E.

TI Conditioning Manager Alphas on Economic Information: Another Look at the Persistence of Performance. **AU** Christopherson, Jon A.; Ferson, Wayne E.; Glassman, Debra A.

PD December 1996. **TI** Fundamental Determinants of National Equity Market Returns: A Perspective on Conditional Asset Pricing. **AU** Ferson, Wayne E.; Harvey, Campbell R. **AA** Ferson: University of Washington and National Bureau of Economic Research. Harvey: Duke University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5860; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 44. **PR** \$5.00. **JE** F30, G12, G15. **KW** Asset Pricing. Financial Markets. International Finance. Risk.

AB This paper provides a global asset pricing perspective on the debate over the relation between predetermined attributes of common stocks, such as ratios of price-to-book-value, cash-flow, earnings, and other variables to the future returns. Some argue that such variables may be used to find securities that are systematically undervalued by the market, while others argue that the measures are proxies for exposure to underlying economic risk factors. It is not possible to distinguish between these views without explicitly modeling the relation between such attributes and risk factors. The authors present an empirical framework for attacking the problem at a global level, assuming integrated markets. They present new evidence on the relative importance of risk and mispricing effects. They find that the cross-sectional explanatory power of the lagged attributes is related to both risk and mispricing in the two-factor model, but the risk effects explain more of the variance than mispricing.

Figlewski, Stephen

PD March 1997. **TI** The Adaptive Mesh Model: A New Approach to Efficient Option Pricing. **AU** Figlewski, Stephen; Goa, Bin. **AA** Figlewski: New York University. Bin: University of North Carolina. **SR** New York University, Salomon Center Working Papers: S/97/05; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 44. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** G13. **KW** Derivatives. Lattice Models. Adaptive Mesh Model. Truncation Error. Option Pricing.

AB Closed-form valuation equations exist for only a small subset of all possible derivative securities. Most have to be priced by some numerical approximation technique, of which Binomial and Trinomial lattice models are the most widely used. While these methods produce exact theoretical derivative valuation in the limit, they suffer from two types of approximation error, "distribution error" and "truncation error," that cause convergence to be non-monotonic and often slow, in that very large numbers of calculations may be needed to achieve an acceptable degree of accuracy. This paper describes the Adaptive Mesh Model (AMM), a new approach that sharply reduces truncation error by grafting one or more small sections of fine high-resolution lattice onto a tree with coarser time and price steps. Three different AMM structures are presented, one for pricing ordinary options, one for barrier options, and one for computing delta and gamma efficiently.

Fishback, Price V.

PD November 1996. **TI** The Adoption of Workers' Compensation in the United States, 1900-1930. **AU** Fishback, Price V.; Kantor, Shawn Everett. **AA** University of Arizona and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5840; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** J28, J38, K31, N41, N42. **KW** Development. American Economy. Worker's Compensation. Social Insurance.

AB The adoption of workers' compensation in the 1910's was a significant event in the economic, legal, and political history of the United States. The legislation represented the first instance of a widespread social insurance program in the United States, setting the stage for the later adoption of federal government programs for unemployment insurance, old-age pensions, and health insurance. In this paper, the authors show that the adoption of workers' compensation was not the result of employers' or workers' capturing the legislation to secure benefits at the expense of the other group. Nor was the success of compensation legislation simply the outcome of Progressive Era social reformers' demands for protective legislation. Workers' compensation was enacted rapidly across the United States in the 1910's because the key economic interest groups with a stake in the legislation anticipated benefits from resolving an apparent crisis in the negligence liability system.

Fisher, Adlai

TI A Multifractal Model of Asset Returns. **AU** Mandelbrot, Benoit; Fisher, Adlai; Calvet, Laurent.

TI Large Deviations and the Distribution of Price Changes. **AU** Calvet, Laurent; Fisher, Adlai; Mandelbrot, Benoit.

PD September 1997. **TI** Multifractality of Deutschemark/US Dollar Exchange Rates. **AU** Fisher, Adlai; Calvet, Laurent; Mandelbrot, Benoit. **AA** Fisher and Calvet: Yale University. Mandelbrot: Yale University and Watson Research Center. **SR** Yale Cowles Foundation Discussion Paper: 1166; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 42. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** G12, G13. **KW** Trading Time. Time Deformation. Scaling Laws. Self-Similarity. Self-Affinity.

AB This paper presents the first empirical investigation of the Multifractal Model of Asset Returns (MMAR). The MMAR, developed in Mandelbrot, Fisher, and Calvet (1997), is an alternative to ARCH-type representations for modeling temporal heterogeneity in financial returns. Multifractality introduces a new source of heterogeneity through time-varying local regularity in the price path. The concept of local Holder exponent describes local regularity in the price path. Multifractal processes bridge the gap between locally Gaussian (Ito) diffusions and jump-diffusions by allowing a multiplicity of Holder exponents. This paper investigates multifractality in Deutschemark/U.S. Dollar currency exchange rates. After finding evidence of multifractal scaling, the authors show how to estimate the multifractal spectrum via the Legendre transform. The scaling laws found in the data are replicated in simulations. Further simulation experiments test whether alternative representations, such as FIGARCH, are likely to replicate the multifractal signature of the Deutschemark/U.S. Dollar data.

Fisher, Anthony

PD June 1998. **TI** The Impact of Global Warming on Agriculture: Rethinking the Ricardian Approach. **AU** Fisher, Anthony; Hanemann, W. Michael. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 842; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 15. **PR** \$5.00

Domestic; \$10.00 International Surface Rate; not available after publication. **JE** Q10, Q24, Q25. **KW** Agriculture. Global Warming. Climate Changes. Ricardian Approach.

AB not available.

Fluck, Zsuzsanna

PD August 1997. **TI** Why Do Firms Merge and Then Divest: A Theory of Financial Synergy. **AU** Fluck, Zsuzsanna; Lynch, Anthony. **AA** New York University. **SR** New York University, Salomon Center Working Papers: S/97/11; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 36. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** G31, G34, L23. **KW** Mergers. Divestitures.

AB This paper develops a theory of mergers and divestitures wherein the motivation for mergers stems from the inability to finance marginally profitable, possibly short-horizon projects as stand-alone entities due to agency problems between managers and potential claimholders. A conglomerate merger can be viewed as a technology that allows a marginally profitable project, which could not obtain financing as a stand-alone, to obtain financing and survive a period of distress. If profitability improves, the financing synergy ends and the acquirer divests assets to avoid coordination costs. Since it is the project's ability to survive as a stand-alone that causes the divestiture, divestiture decisions are interpreted as good news by the market. Further, the authors' theory is able to reconcile two important but seemingly contradictory empirical findings: 1) mergers increase the combined value of the acquirer and target; and 2) diversified firms are less valuable than more focused stand-alone entities.

Fontein, Peter

TI Household Commodity Demand and Demographics in the Netherlands: A Microeconomic Analysis. **AU** Kalwij, Adriaan; Alessie, Rob J. M.; Fontein, Peter.

Frank, Richard G.

TI Alternative Insurance Arrangements and the Treatment of Depression: What are the Facts? **AU** Berndt, Ernst R.; McGuire, Thomas G.; Frank, Richard G.

Franks, Jeffrey

PD April 1997. **TI** Labor Market Policies and Unemployment Dynamics in Spain. **AA** International Monetary Fund. **SR** Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9708; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid. Website: www.bde.es. **PG** 30. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** J64, J68. **KW** Labor Market.

Unemployment.

AB This paper explores the role of adjustment lag and labor market policies in the generation and perpetuation of high unemployment in Spain. A simple three equation model of the labor market is estimated using error correction techniques, allowing for lagged terms so as to capture dynamics adjustment effects. The results suggest that the Spanish labor market adjusts very slowly. The introduction of several policy-related variables into the model demonstrated a number of statistically significant effects of labor market policies on unemployment: 1) higher social contributions and rising severance pay settlements significantly reduce employment; 2) increases in minimum wages and unemployment benefits push up real wages, while increased use of temporary contracts reduce them; 3) unemployment benefits also contribute to unemployment by encouraging higher labor force participation, while increased disability benefits reduce it; 4) labor conflict and greater collective bargaining reduce employment.

Friedberg, Rachel M.

PD November 1996. **TI** You Can't Take it with You? Immigrant Assimilation and the Portability of Human Capital. **AA** Brown University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5837; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 44. **PR** \$5.00. **JE** J24, J61. **KW** Labor Studies. Human Capital. Israel. Immigrants. **AB** The national origin of an individual's human capital is a crucial determinant of its value. Education acquired abroad is significantly less valued than education obtained domestically. This difference can fully explain the earnings disadvantage of immigrants relative to comparable natives in Israel. Variation in the return to foreign schooling across origin countries may reflect differences in its quality and compatibility with the host labor market. Three factors -- language proficiency, domestic labor market experience, and further education following immigration -- appear to raise the return to education acquired abroad, suggesting a compound benefit of policies encouraging immigrants to obtain language and other training.

Frye, Timothy

PD December 1996. **TI** The Invisible Hand and the Grabbing Hand. **AU** Frye, Timothy; Shleifer, Andrei. **AA** Frye: Columbia University. Shleifer: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5856; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 9. **PR** \$5.00. **JE** H54, L50, O17, O20. **KW** Economic Fluctuations. Growth. Invisible Hand. Russia. Poland. **AB** Evidence from a survey of 105 shop-owners in Moscow and Warsaw shows that the reliance on private protection, as well as the burden of regulation and corruption, are much greater in Moscow. The evidence suggests that the invisible hand model of government better fits the Warsaw local government, and the grabbing hand model is more appropriate for Moscow. The evidence implies that the singular focus on the speed of economic reforms to understand the success of transition is misplaced, and that the quality of government may be as essential.

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: Stanford University. Krueger: Princeton University. Poterba: Massachusetts Institute of Technology. **SR** Princeton Industrial Relations Section Working Paper: 389; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 51. **PR** \$2.00. **JE** A10, H10, J10. **KW** Labor Economics. Public Economics. 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.

Gagnon, Joseph E.

PD May 1997. **TI** Inflation Regimes and Inflation Expectations. **AA** Department of the Treasury. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 581; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us. **PG** 35. **PR** no charge. **JE** E31. **KW** Central Bank. Credibility. Inflation Target. Monetary Policy.

AB There has been much talk in the popular press about the difficulty of attaining credibility in the bond markets for the low-inflation policies that have been adopted by a number of central banks in recent years. This credibility problem is particularly severe for those countries that have a history of high inflation. Gaining credibility is often viewed in the context of learning by the public about the central bank's true intentions. However, this paper argues that a more important aspect of credibility -- at least for long-term inflation expectations -- may be public views about how future changes in personnel, electoral results, or economic shocks may affect central bank behavior. In other words, there is always a positive probability that the current regime will end. Views about the nature of possible future regimes are likely to be influenced by observed past regimes.

Gallant, A. Ronald

PD August 1996. **TI** Reprojecting Partially Observed Systems with Application to Interest Rate Diffusions. **AU** Gallant, A. Ronald; Tauchen, George. **AA** Gallant: University of North Carolina. Tauchen: Duke University. **SR** Duke University Department of Economics Working Papers: 97/09; available only through Web site:

www.econ.duke.edu/Papers/wpindex.html. **PG** 37. **PR** no charge. **JE** C10, G12. **KW** Method of Moments. Indirect Inference. Diffusion Estimation. Multifactor Models. Stochastic Volatility.

AB The authors introduce reprojection as a general purpose technique for characterizing the observable dynamics of a partially observed nonlinear system. System parameters are estimated by method of moments wherein moments implied by the system are matched to moments implied by the transition density for observables that is determined by projecting the data onto its Hermite representation. Reprojection imposes the constraints implied by the system on the transition density and is accomplished by projecting a long simulation of the estimated system onto the Hermite representation. The authors utilize the technique to assess the dynamics of several diffusion models for the short-term interest rate that have been proposed and compare them to a new model that has feedback from the interest rate into both the drift and diffusion coefficients of a volatility equation. This effort entails the development of new graphical diagnostics.

Gardecki, Rosella

PD January 1997. **TI** Order from Chaos? The Effects of Early Labor Market Experiences on Adult Labor Market Outcomes. **AU** Gardecki, Rosella; Neumark, David. **AA** Gardecki: Center for Human Resource Research. Neumark: Michigan State University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5899; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** I21, J23, J24, J31, J60. **KW** Labor Market. Employment. Job Stability. Human Capital.

AB This paper examines the consequences of initial periods of churning, floundering about, or mobility in the labor market to help assess whether faster transitions to stable employment relationships -- such as those envisioned by advocates of school-to-work programs -- would be likely to lead to better adult labor market outcomes. The authors' interpretation of the results is that there is at best modest evidence linking early job market stability to better labor market outcomes. They find that adult labor market outcomes (defined as of late 20's or early to mid-30's) are for the most part unrelated to early labor market experiences for both men and women. This evidence does not provide a compelling case for efforts to explicitly target the school-to-work transition, insofar as this implies changing the structure of youth labor markets so that workers become more firmly attached to employers, industries, or occupations at younger ages.

Garret, A. Bowen

TI Medicaid and Service Use Among Homeless Adults. **AU** Glied, Sherry; Hoven, Christina; Moore, Robert; Garret, A. Bowen.

Gentry, William M.

PD November 1996. **TI** Distributional Implications of Introducing A Broad-Based Consumption Tax. **AU** Gentry, William M.; Hubbard, R. Glenn. **AA** Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5832; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 54.

PR \$5.00. **JE** H23, H24. **KW** Public Economics. Consumption Tax. Income Distribution.

AB As a tax base, consumption is sometimes argued to be less fair than income because the benefits of not taxing capital income accrue to high- income households. The authors argue that, despite the common perception that consumption taxation eliminates all taxes on capital income, consumption and income taxes actually treat similarly much of what is commonly called capital income. In contrast to a pure income tax, a consumption tax replaces capital depreciation with capital expensing. This change eliminates the tax on the opportunity cost of capital, but does not change, relative to the income tax, the tax treatment of capital income arising from a risk premium, inframarginal profit, or luck. Because these components of capital income are more heavily skewed toward the top of the distribution of economic well-being, a consumption tax is more progressive than would be estimated under conventional distributional assumptions.

Ghosh, Atish R.

PD January 1997. **TI** Does the Nominal Exchange Rate Regime Matter? **AU** Ghosh, Atish R.; Gulde, Anne-Marie; Ostry, Jonathan D.; Wolf, Holger C. **AA** Ghosh, Ostry, and Gulde: International Monetary Fund. Wolf: New York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5874; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** E31, F31, F33, F41, F43. **KW** International Finance. Exchange Rates. Growth. Inflation. Output Volatility.

AB The relevance of the exchange rate regime for macroeconomic performance remains a key issue in international macroeconomics. The authors use a comprehensive dataset covering nine regime-types for one hundred forty countries over thirty years to examine the link between the regime, inflation, and growth. Two sturdy stylized facts emerge. First, inflation is both lower and more stable under pegged regimes, reflecting both slower money supply and faster money demand growth. Second, real volatility is higher under pegged regimes. In contrast, growth varies only slightly across regimes, though investment is somewhat higher and trade growth somewhat lower under pegged regimes. Pegged regimes are thus characterized by lower inflation but more pronounced output volatility.

Giavazzi, Francesco

TI Options for the Future Exchange Rate Policy of the EMU. **AU** Begg, David K.; Giavazzi, Francesco; Wyplosz, Charles.

Gibson, Michael S.

PD June 1997. **TI** The Bank Lending Channel of Monetary Policy Transmission: Evidence from a Model of Bank Behavior that Incorporates Long-Term Customer Relationships. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 584; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us. **PG** 44. **PR** no charge. **JE** G21. **KW** Monetary Policy Transmission. Bank Lending. Customer Relationships.

AB I test for the existence of a bank lending channel of monetary policy transmission. I identify bank lending channel effects with a simple model of bank behavior incorporating long-term customer relationships. The model suggests that when a large fraction of bank assets is held in loans, contractionary monetary policy shocks are more likely to cause a cutback in bank lending, in turn reducing real economic activity. This implication of the model is supported in the data. I conduct a "horse race" between the bank lending channel and two alternative non-user- cost-of-capital channels of monetary transmission. The bank lending channel is the strongest of the three. The ability of the fraction of bank assets held in loans to predict how the strength of monetary policy transmission varies over time should be of interest to both theorists and forecasters of business cycles.

PD July 1997. **TI** Information Systems for Risk Management. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 585; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us. **PG** 29. **PR** no charge. **JE** G21, G22. **KW** Market Risk. Value at Risk. Risk Measurement.

AB Risk management information systems are designed to overcome the problem of aggregating data across diverse trading units. The design of an information system depends on the risk measurement methodology that a firm chooses. Inherent in the design of both a risk management information system and a risk measurement methodology is a tradeoff between the accuracy of the resulting measures of risk and the burden of computing them. Technical progress will make this tradeoff more favorable over time, leading firms to implement more accurate methodologies, such as full reevaluation of nonlinear positions. The current and likely future improvements in risk management information systems make feasible new ways of collecting aggregate data on firms' risk-taking activities.

Glaeser, Edward L.

TI The Rise and Decline of the American Ghetto. **AU** Cutler, David M.; Glaeser, Edward L.; Vigdor, Jacob L.

Glassman, Debra A.

TI Conditioning Manager Alphas on Economic Information: Another Look at the Persistence of Performance. **AU** Christopherson, Jon A.; Ferson, Wayne E.; Glassman, Debra A.

Glied, Sherry

PD November 1996. **TI** Medicaid and Service Use Among Homeless Adults. **AU** Glied, Sherry; Hoven, Christina; Moore, Robert; Garret, A. Bowen. **AA** Glied: Columbia and National Bureau of Economic Research. Hoven and Moore: Columbia University. Garret: University of California, Berkeley. **SR** National Bureau of Economic Research Working Paper: 5834; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 20. **PR** \$5.00. **JE** I11, I12, I18, J10. **KW** Health Care. Medicaid. Insurance. Homeless.

AB Expansions of Medicaid eligibility intend to improve access to care, and to shift care from emergency rooms and

inpatient hospital care to more appropriate sites. The authors examine the effect of Medicaid reciprocity on the level and site of medical service utilization using data from 1985 and 1987 surveys of New York City homeless single men and women. Simple regressions of Medicaid on the use of health services among homeless adults indicate that Medicaid significantly increases the likelihood that these individuals receive services, especially emergency and inpatient hospital services. The authors test the result in further analyses that control for health status, use instrumental variables procedures, and examine differences between a similar population in 1985 and 1987. These analyses suggest that Medicaid neither increases nor diminishes access to emergency rooms. They find some evidence that suggests that Medicaid does improve access to non-hospital medical care.

Gneezy, Uri

TI Strategic Delegation: An Experiment. **AU** Fershtman, Chaim; Gneezy, Uri.

Goa, Bin

TI The Adaptive Mesh Model: A New Approach to Efficient Option Pricing. **AU** Figlewski, Stephen; Goa, Bin.

Goetzmann, William N.

PD January 1997. **TI** A Century of Global Stock Markets. **AU** Goetzmann, William N.; Jorion, Philippe. **AA** Goetzmann: Yale University and National Bureau of Economic Research. Jorion: University of California, Irvine. **SR** National Bureau of Economic Research Working Paper: 5901; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** F30, G11, G15. **KW** Asset Pricing. Capital Appreciation. Portfolio Choice.

AB The expected return on equity capital is possibly the most important driving factor in asset allocation decisions. Yet, the long-term estimates typically used are derived from U.S. data only. There are reasons to suspect, however, that these estimates of return on capital are subject to survivorship. The purpose of this paper is to provide estimates of return on capital from long-term histories for world equity markets. By putting together a variety of sources, the authors collected a database of capital appreciation indexes for 39 markets with histories going as far back as the 1920's. The authors find that the United States has by far the highest uninterrupted real rate of appreciation of all countries, at about 5 percent annually. For other countries, the median real appreciation rate is about 1.5 percent. The high return premium obtained for U.S. equities therefore appears to be the exception.

PD January 1997. **TI** Re-emerging Markets. **AU** Goetzmann, William N.; Jorion, Philippe. **AA** Goetzmann: Yale University and National Bureau of Economic Research. Jorion: University of California, Irvine. **SR** National Bureau of Economic Research Working Paper: 5906; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** F30, G11. **KW** Asset Pricing. Emerging Markets.

AB Recent research shows that emerging markets are distinguished by high returns and low covariances with global market factors. These are striking results because of their immediate implications for the international investor. One key issue is whether these results are attributable to recent

emergence. Most of today's emerging markets are actually re-emerging markets, i.e. markets that attracted international attention earlier in the century, and for various political, economic and institutional reasons experienced discontinuities in data sources. To analyze the effects of conditioning on recent emergence, the authors simulate a simple, general model of global markets in which markets are priced according to their exposure to a world factor; returns are only observed if the price level exceeds a threshold at the end of the observation period. The authors find that the brevity of a market history is related to the bias in annual returns as well as to the world beta.

Golberg, Pinelopi K.

PD December 1996. **TI** Goods Prices and Exchange Rates: What Have We Learned? **AU** Golberg, Pinelopi K.; Knetter, Michael M. **AA** Goldberg: Princeton University and National Bureau of Economic Research. Knetter: Dartmouth College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5862; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 42. **PR** \$5.00. **JE** E31, F13, F31, F36, L10. **KW** International Finance. International Trade. Investment. Exchange Rates. Pricing.

AB Import prices typically change by a smaller proportion than the exchange rate between the exporting and importing country. Recent research indicates that common-currency relative prices for similar goods exported to different markets are highly correlated with exchange rates between those markets. This evidence suggests that incomplete pass-through is a consequence of third-degree price discrimination. While distance matters for market segmentation, borders have independent effects. The source of the border effect has not been clearly identified. Furthermore, there is little evidence yet to suggest substantial market power is implied by the observed price discrimination.

Goldberg, Lawrence G.

PD June 1997. **TI** De Novo Banks and Lending to Small Businesses: An Empirical Analysis. **AU** Goldberg, Lawrence G.; White, Lawrence J. **AA** Goldberg: University of Miami. White: New York University. **SR** New York University, Salomon Center Working Papers: S/97/08; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 27. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** Not available. **KW** Not available.

AB Not available.

Goldin, Claudia

PD January 1997. **TI** Orchestrating Impartiality: The Impact of Blind Auditions on Female Musicians. **AU** Goldin, Claudia; Rouse, Cecilia Elena. **AA** Goldin: Harvard University and National Bureau of Economic Research. Rouse: Princeton University and National Bureau of Economic Research. **SR** Princeton Industrial Relations Section Working Paper: 376; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 51. **PR** \$1.50. **JE** J16, J23, J44, J71. **KW** Female. Discrimination. Hiring Practices. Blind Auditions. Orchestras. **AB** See the abstract for Goldin, Claudia and Cecilia Elena Rouse. January 1997. "Orchestrating Impartiality: The Impact

of Blind Auditions on Female Musicians". National Bureau of Economic Research Working Paper: 5903; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org.

TI A Distinctive System: Origins and Impact of US Unemployment Compensation. **AU** Baicker, Katherine; Goldin, Claudia; Katz, Lawrence F.

PD January 1997. **TI** Orchestrating Impartiality: The Impact of Blind Auditions on Female Musicians. **AU** Goldin, Claudia; Rouse, Cecilia Elena. **AA** Goldin: Harvard University and National Bureau of Economic Research. Rouse: Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5903; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** J16, J23, J44, J70. **KW** Labor Studies. Discrimination. Gender. Blind Auditions.

AB A change in the way symphony orchestras recruit musicians provides an unusual way to test for sex-biased hiring. To overcome possible biases in hiring, most orchestras revised their audition policies in the 1970's and 1980's. A major change involves the use of blind auditions with a screen to conceal the identity of the candidate from the jury. Female musicians in the top five symphony orchestras in the United States were less than 5% of all players in 1970 but are 25% today. The authors ask whether women were more likely to be advanced and/or hired with the use of blind auditions. Using data from actual auditions in an individual fixed-effects framework, the authors find that the screen increases -- by 50% -- the probability a woman will be advanced out of certain preliminary rounds. The screen enhances the likelihood a female contestant will be the winner in the final round.

Gomez, Victor

PD January 1997. **TI** Missing Observations in Arima Models: Skipping Strategy versus Additive Outlier Approach. **AU** Gomez, Victor; Maravall, Agustin; Pena, Daniel. **AA** Gomez: Ministerio de Economia y Hacienda, Madrid. Maravall: Banco de Espana. Pena: Universidad Carlos III. **SR** Banco de Espana Servicio de Estudios Documento de Trabajo: 9701; Banco de Espana. Seccion de Publicaciones. Negociado de Distribucion y Gestion. Alcala 50. 28104 Madrid. Website:www.bde.es. **PG** 18. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** C22. **KW** Time Series. ARIMA Models. Missing Observations. Outliers. Nonstationarity. Likelihood. Kalman Filter.

AB Optimal estimation of missing values in ARMA models is typically performed by using the Kalman Filter for likelihood evaluation, "skipping" in the computation the missing observations, obtaining the maximum likelihood (ML) estimators of the model parameters, and using some smoothing algorithm. The same type of procedure has been extended to nonstationary ARIMA models in Gomez and Maravall (1994). An alternative procedure suggests filling in the holes in the series with arbitrary values and then performing ML estimation of the ARIMA model with Additive Outliers (AO). When the model parameters are not known the two methods differ, since the AO likelihood is affected by the arbitrary values. We develop the proper likelihood for the AO approach in the general non-stationary case and show the equivalence of this

and the skipping method. Computationally efficient ways to apply both procedures, based on an Augmented Kalman Filter, are detailed. Finally, the two methods are compared through simulation, and their relative advantages assessed; the comparison also includes the AO method with the uncorrected likelihood.

Gonzalez Paramo, Jose Manuel

TI Empresa Publica y Empresa Privada: Titularidad y Eficiencia Relativa. **AU** Argimon, Isabel; Artola, Concha; Gonzalez Paramo, Jose Manuel.

Gonzalez-Minguez, Jose M.

PD August 1997. **TI** The Balance-Sheet Transmission Channel of Monetary Policy: The Cases of Germany and Spain. **AA** Banco de Espana. **SR** Banco de Espana. Servicio de Estudios. Documento de Trabajo: 9713; Banco de Espana. Seccion de Publicaciones. Negociado de Distribucion y Gestion. Alcala 50. 28104 Madrid. Website:www.bde.es. **PG** 41. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** E52. **KW** Monetary Policy Transmission. Balance-Sheet Channel.

AB In this paper the role of the financial position of private agents in the transmission of monetary policy (the balance-sheet channel) is explored. To the extent that official interest rates are able to affect the market value and the income flows of certain categories of financial instruments and that these changes in financial wealth and interest income have an effect on aggregate expenditure, output and prices, supplementary transmission mechanisms arise in addition to those related to the substitution between current and future (or between domestic and foreign) demand. However, the pass-through from official interest rates to market rates and asset prices and the sensitivity of demand to wealth and interest income are not dealt with in the current exercise. By focusing mainly on analyzing the financial position of private agents in two countries (Germany and Spain), the scope is substantially more limited. Evidence provided points towards relatively small differences in the potential extent of the balance-sheet channel in both countries, although its potency seems to be larger in the case of Germany, particularly as far as non-financial enterprises are concerned.

PD November 1997. **TI** The Back Calculation of Nominal Historical Series After the Introduction of the European Currency. **AA** Banco de Espana. **SR** Banco de Espana. Servicio de Estudios. Documento de Trabajo: 9720; Banco de Espana. Seccion de Publicaciones. Negociado de Distribucion y Gestion. Alcala 50. 28104 Madrid. Website:www.bde.es. **PG** 16. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** C43. **KW** Aggregation. Historical Series. Purchasing Power Parity. Monetary Union.

AB Monetary Union in Europe raises the problem of converting into euros nominal historical series calculated in the respective national currencies. The aim of this paper is to evaluate alternative conversion procedures, including the use of the rates fixed at the start of Stage Three between the national currencies and the euro, historical market exchange rates series and PPS series. These alternatives are ranked according to the ability of the transformed series to approximate the rates of growth of the original series and the real weight of each country's series within the aggregate.

Gonzalo, Jesus

TI Testing for Multicointegration. **AU** Engsted, Tom; Gonzalo, Jesus; Haldrup, Niels.

Gray, Stephen F.

TI Target Zones and Exchange Rates: An Empirical Investigation. **AU** Bekaert, Gcort; Gray, Stephen F.

Gray, Wayne B.

PD January 1997. **TI** Manufacturing Plant Location: Does State Pollution Regulation Matter? **AA** Clark University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5880; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** H71, H73, L51, Q28. **KW** Public Economics. Pollution Regulation. Environment. Firm Location.

AB This paper tests whether differences across states in pollution regulation affect the location of manufacturing activity in the U.S. Plant-level data from the Census Bureau's Longitudinal Research Database is used to identify new plant births in each state over the 1963-1987 period. This is combined with several measures of state regulatory intensity, including business pollution abatement spending, regulatory enforcement activity, congressional pro-environment voting, and an index of state environmental laws. A significant connection is found: states with more stringent environmental regulation have fewer new manufacturing plants. These results persist across a variety of econometric specifications, and the strongest regulatory coefficients are similar in magnitude to those on other factors expected to influence location, such as unionization rates. However, a subsample of high-pollution industries gets similar coefficients. This raises the possibility that differences between states other than environmental regulation might be influencing the results.

Greenan, Nathalie

PD November 1996. **TI** Computers and Productivity in France: Some Evidence. **AU** Greenan, Nathalie; Mairesse, Jacques. **AA** Greenan: INSEE-DSE. Mairesse: INSEE-CREST and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5836; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 43. **PR** \$5.00. **JE** C20, C81, D24, L60, O33. **KW** Productivity. France. Computers.

AB In this paper, the authors make a first attempt to explore the relationship between computer use and productivity in French manufacturing and services industries. They match information on computer utilization in the work place collected at the employee level in the years 1987, 1991, and 1993, with information on firm productivity, capital intensity and average wage available at the firm level. Being based on the answers of very few interviewed employees, the authors' measure of firm computer use is subject to important sampling errors, and hence our estimates of computer impacts are largely affected by random errors in variables downward biases. Nonetheless they find coherent and persuasive evidence that the computer impacts on productivity are indeed positive and that the returns to the firm should at least be in the same range as the returns to the other types of capital.

Gregg, Paul

PD August 1996. **TI** Mind the Gap, Please? The Changing Nature of Entry Jobs in Britain. **AU** Gregg, Paul; Wadsworth, Jonathan. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 303; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 48. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** J30, J60. **KW** Inequality. Entry Jobs. Polarization.

AB Britain, perhaps uniquely, has experienced simultaneous rises in both wage inequality and polarization of employment across households over the past twenty years. This article investigates the inter-relation of these two trends by examining the changing nature of new jobs and the characteristics of the individuals who fill them. One of the principal reasons why new jobs are increasingly taken by individuals with partners in work is the low wages associated with these jobs. Using a simple matching framework, a rising share of bad, low quality, jobs in the stock of entry jobs can be shown to be consistent with a positive labor supply shock, rising separation rates, cost of productivity shocks, all of which have hit Britain, to some degree, over the past fifteen years. Using household survey data, the paper shows that real entry wages have fallen relative to the wages of those in other jobs. Entry jobs are dominated by high turnover forms of employment, part-time, temporary working and self-employment. Low wage/high turnover forms of working are less likely to be filled by those from workless households. Rising wage inequality re-enforces employment polarization.

PD June 1997. **TI** Random or Non-Random Matching? Implications for the Use of the UV Curve as a Measure of Matching Effectiveness. **AU** Gregg, Paul; Petrongolo, Barbara. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 348; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 38. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** J63, J64. **KW** Non-Random Matching. Beveridge Curve.

AB The instability of the Beveridge curve in Britain since the mid-50's has been interpreted as revealing a deterioration of labor market effectiveness in matching vacancies to unemployed job-seekers. This paper repeats the stability analysis of the matching technology, having relaxed some of the restrictions generally imposed in deriving a Beveridge curve. We explore the robustness of the curve under an essentially continuous-time non-random matching technology. The non-random nature of the matching process is derived from a theoretical standpoint of stock/flow matching technology that excludes interactions between the existing stocks of unmatched unemployed and vacancies. The empirical analysis based on this premise leads to a re-thinking of standard conclusions on matching effectiveness.

Griliches, Zvi

TI Research Productivity in a System of Universities. **AU** Adams, James D.; Griliches, Zvi.

Gronau, Reuben

PD March 1997. **TI** The Demand for Labor and Job

Turnover: Israeli Manufacturing 1970- 1994. **AU** Gronau, Reuben; Regev, Haim. **AA** Gronau: Hebrew University and The Falk Institute for Economic Research. Regev: The Central Bureau of Statistics, Israel and The Falk Institute for Economic Research. **SR** Princeton Industrial Relations Section Working Paper: 378; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 38. **PR** \$1.50. **JE** J23. **KW** Labor. Job Turnover. Israeli Manufacturing. **AB** Not available.

PD January 1998. **TI** A Useful Interpretation of R Squared in Binary Choice Models (Or, Have We Dismissed the Good Old R Squared Prematurely). **AA** Princeton University and Hebrew University. **SR** Princeton Industrial Relations Section Working Paper: 397; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 14. **PR** \$1.00. **JE** C35. **KW** Binary Variable. Qualitative Choice. Arithmetic Mean.

AB The discreditation of the Linear Probability Model (LPM) has led to the dismissal of the standard R squared as a measure of goodness-of-fit in binary choice models. It is argued that as a descriptive tool the standard R squared is still superior to the measures currently in use. In the LPM model R squared has a simple interpretation: it equals the difference between the average predicted probability in the two groups. It also measures the fraction of the explained part of the variance (SSR) due to the difference between the conditional means (SSB). Given R squared and the sample proportion P one can calculate the conditional means. This interpretation still holds for non-linear cases when R squared is computed as the regression coefficient of the predicted value on the dependent binary variable. However, even if other definitions of R squared are used in this case, the measure is very close to the conditional means.

Gros, Daniel

TI Estimating the Costs and Benefits of EMU: The Impact of External Shocks on Labor Markets. **AU** Belke, Ansgar; Gros, Daniel.

Grossman, Gene M.

PD September 1997. **TI** Free Trade vs. Strategic Trade: A Peek into Pandora's Box. **AU** Grossman, Gene M.; Maggi, Giovanni. **AA** Princeton University. **SR** Princeton Financial Research Center Memorandum: 190; Financial Research Center, Department of Economics, Princeton University, Princeton, New Jersey 08544-1021. **PG** 29. **PR** \$3.00 for U.S. mailings; \$6.00 for foreign mailings. **JE** D82, F13. **KW** Strategic Trade Policy. Export Subsidies. Policy Commitment. Rules. Discretion.

AB The authors investigate whether a welfare-maximizing government ought to pursue a program of strategic trade intervention or instead commit itself to free trade when, in the former case, domestic firms will have an opportunity to manipulate the government's choice as to the level of intervention. Domestic firms may overinvest in physical and knowledge capital in a regime of strategic intervention in order to influence the government's choice of subsidy. In this event, a commitment to free trade may be desirable even in settings where profit-shifting would be possible. The authors analyze the desirability of such a commitment when the government is well informed about firms' types and actions, and when it suffers from an informational disadvantage.

Grossman, Herschel

PD July 1997. **TI** Predation and Moral Decay. **AU** Grossman, Herschel; Kim, Minscong. **AA** Grossman: Brown University. Kim: Political Economy Research Group. **SR** University of Western Ontario Papers in Political Economy: 80; Department of Economics, Social Science Center, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.ssc1.uwo.ca/economics. **PG** 37. **PR** no charge. **JE** C73, D51, D71, D82. **KW** General Equilibrium. Morality. Predation.

AB This paper extends the framework of general economic equilibrium by allowing people to choose either to be producers or predators. The authors analyze both the determination of the ratio of predators to producers within a generation as well as the evolution of the ratio of predators to producers over generations. The analysis assumes that some people, who are denoted as moral, always choose to be producers, whereas other people, who are denoted as amoral, choose to be either producers or predators depending on whether production or predation yields higher consumption. The authors find that, with either individual choice or collective choice of the fraction of resources allocated to guarding against predation, as long as the ratio of amoral people to moral people is not too large, all of the amoral people choose to be predators, and amoral people consume more than moral people.

Gruber, Jonathan

PD November 1996. **TI** Health Insurance for Poor Women and Children in the US: Lessons from the Past Decade. **AA** Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 5831; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 53. **PR** \$5.00. **JE** I11, I12, I18, J13. **KW** Medicaid. Health Care. Insurance.

AB The Medicaid program, which provides health insurance coverage to low income women and children, has expanded dramatically over the past decade. This expansion provides a natural laboratory for learning about the effect of public health insurance eligibility on insurance coverage, health utilization, and health outcomes. This paper provides an overview of what has been learned about these questions from studying the expansions. Medicaid eligibility rose steeply over the 1984-1992 period, but coverage rose much less sharply, due to limited take-up of benefits. This is partly due to the fact that many eligibles already had private insurance coverage, and evidence suggests that a large share of new enrollees dropped their private coverage to join the program. Nevertheless, utilization of preventive care rose substantially as a result of the expansions, and there were significant improvements in health outcomes, specifically infant and child mortality.

PD December 1996. **TI** Disability Insurance Benefits and Labor Supply. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5866; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 41. **PR** \$5.00. **JE** H55, I18, J22, J26, J28. **KW** Health Care. Labor Studies. Public Economics. Labor Supply. Canada.

AB Disability Insurance (DI) is a public program that provides income support to persons unable to continue work due to disability. The difficulty of defining disability, however, has raised the possibility that this program may be subsidizing

the early retirement of workers who are not truly disabled. A critical input for assessing the optimal size of the DI program is therefore the elasticity of labor force participation with respect to benefits generosity. The author considers the experience of Canada, which operates two distinct DI programs, for Quebec and the rest of Canada. The latter program raised its benefits by 36% in January, 1987, while benefits were constant in Quebec, providing exogenous variation in benefits generosity across similar workers. The author finds that there was a sizable labor supply response to the policy change.

Grubert, Harry

TI Balance Sheets, Multinational Financial Policy, and the Cost of Capital at Home and Abroad. **AU** Altshuler, Rosanne; Grubert, Harry.

Gulde, Anne-Marie

TI Does the Nominal Exchange Rate Regime Matter? **AU** Ghosh, Atish R.; Gulde, Anne-Marie; Ostry, Jonathan D.; Wolf, Holger C.

Gurkan, Gul

PD September 1997. **TI** Sample-Path Solutions for Simulation Optimization Problems and Stochastic Variational Inequalities. **AU** Gurkan, Gul; Ozge, Yonca A.; Robinson, Stephen M. **AA** Gurkan: CentER for Economic Research and Tilburg University. Ozge: Information Technology Laboratory. Robinson: University of Wisconsin- Madison. **SR** Tilburg CentER for Economic Research Discussion Paper: 9778; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 30. **PR** no charge. **JE** C15, C60, C61. **KW** Sample-Path Solutions. Simulation Optimization.

AB In this paper, we give an overview of some recent developments in using simulation together with gradient estimation techniques to provide solutions for difficult stochastic optimization problems and stochastic variational inequalities. The basic idea is to observe a fixed sample path (by using the method of common random numbers from the simulation literature), solve the resulting deterministic problem using fast and effective methods from nonlinear programming, and then use the resulting solutions to infer information about the solution of the original stochastic problem. We describe these so-called sample-path methods precisely, review some conditions under which they are known to work, and comment on their potential advantages and limitations. We also illustrate some application areas in which these ideas have been successful.

PD September 1997. **TI** Sample-Path Solution of Stochastic Variational Inequalities. **AU** Gurkan, Gul; Ozge, Yonca A.; Robinson, Stephen M. **AA** Gurkan: CentER for Economic Research and Tilburg University. Ozge and Robinson: University of Wisconsin-Madison. **SR** Tilburg CentER for Economic Research Discussion Paper: 9787; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 31. **PR** no charge. **JE** C15, C60, C61, C72. **KW** Variational Inequality. Sample-Path Optimization. Simulation. Coherent Orientation. Strong Regularity. **AB** Sample-path optimization is a simulation-based method for solving optimization problems that arise in the study of

complex stochastic systems. In this paper we broaden its applicability to include the solution of stochastic variational inequalities. This formulation can model equilibrium phenomena in physics, economics, and operations research. We describe the method, provide general conditions for convergence, and present numerical results of an application of the method to a stochastic economic equilibrium model of the European natural gas market. We also point out some current limitations of the method and indicate areas in which research might help.

PD October 1997. **TI** Simulation Optimization of Buffer Allocations in Production Lines with Unreliable Machines. **AA** CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9797; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 37. **PR** no charge. **JE** C15, C61, C63. **KW** Stochastic Optimization. Buffer Allocation. Manufacturing Lines. Steady-State Throughput.

AB We use a recent simulation-based optimization method, sample-path optimization, to find optimal buffer allocations in tandem production lines where machines are subject to random breakdowns and repairs. We explore some of the functional properties of throughput of such systems and exploit these properties to prove the almost sure convergence of our optimization techniques, under a regularity condition on the steady-state. Utilizing a generalized semi-Markov process (GSMP) representation of the system, we derive recursive expressions to compute one-sided directional derivatives of throughput, from a single simulation run. Finally we give computational results for lines from a more conventional method, stochastic approximation, whenever applicable. In these numerical studies, our method performed quite well on problems that are difficult by current computational standards.

PD October 1997. **TI** Functional Properties of Throughput in Tandem Lines with Unreliable Servers and Finite Buffers. **AU** Gurkan, Gul; Ozge, Yonca A. **AA** Gurkan; CentER for Economic Research and Tilburg University. **Ozge**: General Electric Company. **SR** Tilburg CentER for Economic Research Discussion Paper: 97100; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 17. **PR** no charge. **JE** C15, C61, C63. **KW** Multifunctions. Stochastic Optimization. Tandem Queues. Throughput. Unreliable Servers. Buffer Spaces.

AB We explore functional properties of throughput in tandem production lines with unreliable servers, finite buffers, and arbitrary failure and repair times. We provide a mathematical framework that makes use of a function space construction to model the dependence of throughput on buffer capacities and maximum flow rates of machines. Using this framework we prove various structural properties of throughput and mention how these properties can be used to guarantee almost-sure convergence of sample-path optimization, a simulation-based optimization method, when applied to the optimal buffer allocation problem. Our exposition demonstrates the utility of using multifunctions in the modeling, analysis, and optimization of discrete event dynamic systems. Among the properties established, monotonicity in buffer capacities and in machine flow rates are especially important. Although monotonicity results of this nature have appeared in the

literature for discrete tandem lines, as far as we are aware the kind of analysis we present here has not yet been done for continuous tandem lines.

Guth, Werner

TI Indirect Evolution Versus Strategic Delegation: A Comparison of Two Approaches to Explaining Economic Institutions. **AU** Dufwenberg, Martin; Guth, Werner.

PD April 1997. **TI** Ultimatum Proposals -- How Do Decisions Emerge? **AA** Humboldt University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9740; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 25. **PR** no charge. **JE** C70. **KW** Ultimatum Proposals. Decision Emergency.

AB The basic idea of decision emergence is to generate the preferred decision alternative instead of assuming it as exogenously given like in neo-classical economics and game theory. The particular problem of ultimatum proposals has been selected in order to rely on experimental observations when speculating how choices emerge. Our approach distinguishes primary and secondary concerns of ultimatum proposers and illustrates how qualitative learning can (re)shape preferences over choices.

PD May 1997. **TI** Boundedly Rational Decision Emergence -- A General Perspective and Some Selective Illustrations. **AA** CentER for Economic Research, Tilburg University and Humboldt University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9748; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 32. **PR** no charge. **JE** D63, D74, D83. **KW** Behavioral Economics. Cognitive Dynamics. Directional Learning. Problem Solving. Adaptation.

AB For a restricted class of decision problems a general framework is outlined specifying how boundedly rational decision makers generate their choices. Starting from a "Master Module" which keeps an inventory of previously successful and unsuccessful behavioral routines several submodules can be called forth which with allow to adjust behavior quantitatively (by Directional Learning and Adaptation Procedure) or qualitatively (by Cognitive Updating), or to generate new decision routines (by applying New Problem Solver). Our admittedly bold attempt is validated by relating our theoretical constructs to some selective stylized experimental results.

PD June 1997. **TI** When Will the Fittest Survive? An Indirect Evolutionary Analysis. **AU** Guth, Werner; Peleg, Bezalel. **AA** Guth; Humboldt University. **Peleg**: Hebrew University of Jerusalem. **SR** Tilburg CentER for Economic Research Discussion Paper: 9768; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 21. **PR** no charge. **JE** B30, C70, O31. **KW** Evolutionary Analysis.

AB Survival of the fittest means that phenotypes behave as if they would maximize reproductive success. An indirect evolutionary analysis allows for stimuli which are not directly related to the reproductive success although they affect behavior. One first determines the solution for all possible constellations of stimuli and then the evolutionarily stable

stimuli. Our general analysis confirms the special results of former studies that survival of the fittest in case of commonly known stimuli requires either that own success does not depend on other's behavior or that other's behavior is not influenced by own stimuli. When stimuli are private information one can derive similar necessary conditions for the survival of the fittest.

TI Trust in the Shadow of the Courts. **AU** Brennan, Geoffrey; Guth, Werner; Kliemt, Hartmut.

Haile, Philip A.

PD December 1997. **TI** Auctions with Private Uncertainty and Resale Opportunities. **AA** University of Wisconsin. **SR** University of Wisconsin -- Madison, Social Systems Research Institute Working Paper Series: 9801; Social Systems Research Institute, University of Wisconsin -- Madison, 1180 Observatory Drive, Room 6470, Madison, Wisconsin 53706. Website: www.ssc.wisc.edu/econ/achive. **PG** 29. **PR** first 3 papers per year are free; thereafter, \$6.00 for Canada, U.S., and Mexico; \$8.00 for international; \$60 for Canada, U.S., and Mexico or \$80 international for yearly subscriptions. **JE** D44, D82, D89. **KW** Auctions. Resale Markets. Endogenous Valuations. Signaling.

AB This paper studies auctions held before bidders are sure of the values they place on the object for sale, leaving potential gains to subsequent resale trade. While important insights from models of auctions without resale carry over, equilibrium bidding can be fundamentally altered by the endogeneity of valuations and the informational linkages between primary and secondary markets. As a result, models ignoring resale may often misguide policy and interpretation of bidding data. Furthermore, results regarding players' incentives to signal through their bids, the effects of resale on auction revenues, and revenue comparisons between standard auctions depend on the structure of the secondary market.

Haldrup, Niels

TI Testing for Multicointegration. **AU** Engsted, Tom; Gonzalo, Jesus; Haldrup, Niels.

PD June 1997. **TI** A Review of the Econometric Analysis of I(2) Variables. **AA** University of Aarhus. **SR** Aarhus Department of Economics Working Paper: 1997/12; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. **PG** 79. **PR** no charge. **JE** C32, C40. **KW** I(2) Processes. Unit-Root Tests. VAR Models. Error-Correction Models.

AB This paper provides a survey of the recent literature dealing with I(2) variables in economic time series, that is, processes that require to be differenced twice in order to become stationary. With reference to particular models intuition is provided of why I(2) and polynomial cointegration are features likely to occur in economics. The properties of I(2) series are discussed and I review topics such as: Testing for double unit roots, representations of I(2) cointegrated systems, and hypothesis testing in single equations as well as in systems of equations. Different data sets are used to illustrate the various econometric and statistical techniques.

TI Multicointegration in Stock-Flow Models. **AU** Engsted, Tom; Haldrup, Niels.

Hall, Brian J.

PD November 1996. **TI** The Myth of the Patient Japanese: Corporate Myopia and Financial Distress in Japan and the US. **AU** Hall, Brian J.; Weinstein, David E. **AA** Harvard University. **SR** National Bureau of Economic Research Working Paper: 5818; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** E22, E32, G31, O32. **KW** Japan. Myopia. Research and Development. Investment.

AB It is widely believed that the stock-market oriented U.S. financial system forces corporate managers to behave myopically relative to their Japanese counterparts, who operate in bank-based system. The authors hypothesize that if U.S. firms are more myopic than Japanese firms, then episodes of financial distress should cause U.S. firms to decrease their R&D spending more than Japanese firms. The authors find no evidence that this is the case. In addition, the paper shows that Japanese firms do not invest more than U.S. firms after the onset of distress. The results hold up even when U.S. firms are compared to Japanese "group" firms, which have close financial ties to their banks and are thought to be the least myopic. The results also withstand a variety of robustness checks. The findings that U.S. and Japanese firms respond similarly to financial distress cast doubt on the view that U.S. managers are more short-sighted.

Hall, George J.

PD December 1997. **TI** Non-Convex Costs and Capital Utilization: A Study of Production Scheduling at Automobile Assembly Plants. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1169; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 37. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** E22, J21, L23, L62. **KW** Inventories. Layoffs. Dynamic Programming. Production Smoothing.

AB This paper studies how managers at automobile assembly plants organize production across time. At plants which make low- and medium-selling vehicles the capital stock often sits idle, production is more variable than sales, and weeklong shutdowns are often used to vary output. In contrast, at plants which make high-selling vehicles, the capital stock rarely sits idle, production is about as variable as sales, and overtime is more frequently used to vary output. To explain this difference, the author formulates and solves a dynamic programming model of a plant manager. The solution to the dynamic program predicts that when sales are low, non-convexities at the plant level induce the manager to bunch production at points of low average cost; thus, the manager uses less than full capital utilization on average and makes production more volatile than sales. When sales are high, the plant operates in a convex region of the cost curve.

Hall, Robert E.

PD November 1996. **TI** The Productivity of Nations. **AU** Hall, Robert E.; Jones, Charles I. **AA** Hall: Stanford University and National Bureau of Economic Research. Jones: Stanford University. **SR** National Bureau of Economic Research Working Paper: 5812; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** D24, F43, J24, O47. **KW** Productivity. Infrastructure. International Trade. Private Ownership.

AB Output per worker varies enormously across countries. Why? Our analysis shows that differences in governmental, cultural, and natural infrastructure are important sources of this variation. According to our results, a high-productivity country (I) has institutions that favor production over diversion, (II) is open to international trade, (III) has at least some private ownership, (IV) speaks an international language, and (V) is located in a temperate latitude far from the equator. A favorable infrastructure helps a country both by stimulating the accumulation of human and physical capital and by raising its total factor productivity.

Hamermesh, Daniel S.

PD December 1996. **TI** The Timing of Work Time Over Time. **AA** University of Texas and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5855; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** \$5.00. **JE** D31, J22. **KW** Labor Studies. Employment. Work Day.

AB The incidence of evening and night work declined sharply in the United States between the early 1970's and the early 1990's, while the fraction of work performed at the fringes of the traditional regular working day grew. The secular decline in evening and night work did not result from industrial shifts or demographic changes. It was greatest at the upper end of the wage distribution, slowest among workers in the lowest quartile of wages. The observed changes in timing are consistent with and magnify the increase in wage inequality in the U.S. that occurred during this period. They are easily explained by a model that views evening/night work as a disamenity, with rising real incomes causing workers to shift away from such work in the presence of only neutral technical change in the profitability of work at different times of day.

Hamilton, Gary G.

TI Business Groups and Trade in East Asia: Part I, Networked Equilibria. **AU** Feenstra, Robert; Huang, Deng-Shing; Hamilton, Gary G.

TI Business Groups and Trade in East Asia: Part 2, Product Variety. **AU** Feenstra, Robert; Yang, Maria; Hamilton, Gary G.

Hancock, John

TI Cost of Capital for the United States, Japan, and Canada: An Attempt at Measurement Based on Individual Company Records and Aggregate National Accounts Data. **AU** Ando, Albert; Hancock, John; Sawchuk, Gary.

Hanemann, W. Michael

TI The Impact of Global Warming on Agriculture: Rethinking the Ricardian Approach. **AU** Fisher, Anthony; Hanemann, W. Michael.

Harvey, Campbell R.

TI Fundamental Determinants of National Equity Market Returns: A Perspective on Conditional Asset Pricing. **AU** Ferson, Wayne E.; Harvey, Campbell R.

Heijdra, Ben J.

PD September 1997. **TI** Public Investment in a Small Open Economy. **AU** Heijdra, Ben J.; Meijdam, Lex.

AA Heijdra: University of Amsterdam, Tilburg University, Tinbergen Institute and OCFEB. Meijdam: CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9780; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 41. **PR** no charge. **JE** D62, E62, F41, H23, H54. **KW** Public Investment. Welfare Effects.

AB We study the effect of public investment in a dynamic overlapping- generations model of a small open economy. Boosting public investment stimulates private capital formation, output, employment, and wages in the long run. The impact effects depend critically on whether public capital is modeled as a stock or as a flow. The welfare benefits are unevenly distributed across generations since capital ownership, and the capital gain induced by the policy shock, rises with age, and because wages rise only gradually under the stock interpretation of public capital. A suitable egalitarian bond policy can be employed to ensure that everybody gains to the same extent. With this additional instrument the intergenerational externality can be neutralized and the resulting efficiency gain coincides with the one obtained in the corresponding representative agent model. A simple modified golden rule for public investment is derived which takes into account the time is needed to build the capital stock.

Helen, Levy

PD April 1998. **TI** Who Pays for Health Insurance? Employee Contributions to Health Insurance Premiums. **AA** Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 398; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 64. **PR** \$2.00. **JE** H24, I11, J32. **KW** Health Insurance. Compensation. Taxation.

AB Most private health insurance in the U.S. is provided as a benefit of employment. One explanation for this phenomenon is that employer contributions to health insurance premiums are not taxed as income to the worker. It is somewhat puzzling, then, that a substantial fraction of workers contribute to their premiums, since these contributions are frequently made out of after-tax dollars. In this paper the author examines the possibility that firms use employee contributions to distinguish between workers who do and do not want health insurance, in order to compensate them more efficiently when recruiting additional workers is costly. This model has clear predictions for the relationship between worker demand for health insurance and (1) the probability that health insurance is offered; (2) the probability that an employee contribution is required; (3) the probability that the firm establishes a Flexible Spending Account that allows the employee contribution to be made pre-tax.

Helliwell, John F.

PD December 1996. **TI** Do Borders Matter for Social Capital? Economic Growth and Civic Culture in US States and Canadian Provinces. **AA** University of British Columbia and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5863; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 28. **PR** \$5.00. **JE** F15, J15, O15, O40, P52. **KW** Migration. Growth. Canada. Trust.

AB The paper first assesses regional and ethnic group differences in social trust and memberships in both Canada and the United States. The ethnic categories people choose to describe themselves are as important as regional differences, but much less important than education, in explaining differences in trust. Respondents who qualify their nationality by any of seven adjectives, a feature more prevalent in the United States than in Canada, have lower levels of trust than those who consider themselves Canadian or Americans either first or only. The dispersion of incomes across states or provinces has been dropping in both countries, but faster in Canada than in the United States. The 1980's increase in regional income disparity in the United States has no parallel in Canada. In neither country is there evidence that per capita economic growth is faster in regions marked by high levels of trust.

Henderson, Dale W.

PD June 1997. **TI** Can Government Gold Be Put to Better Use?: Qualitative and Quantitative Effects of Alternative Policies. **AU** Henderson, Dale W.; Irons, John S.; Salant, Stephen W.; Thomas, Sebastian. **AA** Henderson: Federal Reserve Board. Irons: Massachusetts Institute of Technology. Salant: University of Michigan. Thomas: Miller, Anderson and Sherrerd, LLP. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 582; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. **Website:** www.bog.frb.fed.us. **PG42.** **PG** Not Given. **PR** no charge. **JE** C72. **KW** Gold. Exhaustible Resource. Durables Extraction.

AB Gold has both private uses (depletion uses and service uses) and government uses. It can be obtained from mines with high extraction costs (about \$300 per ounce) or from above ground stocks with no extraction costs. Governments still store massive stocks of gold. Making government gold available for private uses through some combination of sales and loans raises welfare from private uses by removing two types of inefficiencies. For given private uses, there is a production inefficiency if costless government gold is withheld while costly gold is taken from mines. There are use inefficiencies if costless government gold is withheld from private users. We assess both qualitatively and quantitatively the gain in welfare and its distribution. Any policy in a class maximizes welfare from private uses. One policy involves selling government gold immediately. Another involves lending all remaining government gold in every period and selling government gold gradually after some future time. Government uses might require gold ownership but not gold storage. If so, any loss in welfare from government uses would be much smaller under the policy involving lending and selling gradually. We construct and calibrate a model of the gold market. We prove that governments always obtain more revenue by making their gold available sooner.

Hendrickson, Michael K.

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

Herings, Jean-Jacques P.

PD December 1996. **TI** Retirements of Rationalizability for Normal-Form Games. **AU** Herings, Jean-Jacques P.;

Vannetelbosch, Vincent J. **AA** Herings: Center for Economic Research and Tilburg University. Vannetelbosch: University of Louvain. **SR** Tilburg Center for Economic Research Discussion Paper: 9703; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. **Website:** cwis.kub.nl/few5/center/center.htm. **PG** 26. **PR** no charge. **JE** C72. **KW** Rationalizability. Refinements.

AB In normal-form games, rationalizability (Bernheim, Pearce) on its own fails to exclude some very implausible strategy choices. Three main refinements of rationalizability have been proposed in the literature: cautious, perfect, and proper rationalizability. Nevertheless, some of these refinements also fail to eliminate unreasonable outcomes and suffer from several drawbacks. Therefore, we introduce the trembling-hand rationalizability concept, where the players' actions have to be best responses also against perturbed conjectures. We also propose another refinement: weakly perfect rationalizability, where players' actions that are not best responses are only played with a very small probability. We show the relationship between perfect rationalizability and weakly perfect rationalizability as well as the relationship between proper rationalizability and weakly perfect rationalizability: weakly perfect rationalizability is a weaker refinement than both perfect and proper rationalizability. Moreover, in two-player games it holds that weakly perfect rationalizability is a weaker refinement than trembling-hand rationalizability. The other relationships between the various refinements are illustrated by means of examples. For the relationship between any other two refinements we give examples showing that the remaining set of strategies corresponding to the first refinement can be either smaller or larger than the one corresponding to the second refinement.

PD September 1997. **TI** Two Simple Proofs of the Feasibility of the Linear Tracing Procedure. **AA** Center for Economic Research and Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9777; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. **Website:** cwis.kub.nl/few5/center/center.htm. **PG** 13. **PR** no charge. **JE** C72. **KW** Non-Cooperative Game Theory. Tracing Procedures. Equilibrium Selection. Browder's Fixed Point Theorem.

AB Theories of equilibrium selection in non-cooperative games, as well as the notion of risk dominance, depend heavily on the so-called linear tracing procedure. The only proof for the feasibility of the linear tracing procedure is given in Schanuel, Simon, and Zame (1991). They show by means of heavy mathematical machinery that the so-called logarithmic tracing procedure selects a unique Nash equilibrium for every game. Using that result it can be shown by means of a straightforward limit argument that the linear tracing procedure is feasible. In this paper we give two direct, simple proofs of the feasibility of the linear tracing procedure. The first one utilizes a result that is related to Kakutani's fixed point theorem and that is an extension of Browder's fixed point theorem. The second proof shows that it is even possible to avoid the use of correspondence.

Hernando, Ignacio

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

Heuts, R.

TI Applications of P-Median Techniques to Facilities Design Problems: An Improved Heuristic. **AU** Ashayeri, J.; Heuts, R.; Tammel, B.

Hochguertel, Stefan

PD June 1997. **TI** Precautionary Motives and Portfolio Decisions. **AA** Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9755; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 42. **PR** no charge. **JE** D12, E21, G11. **KW** Precautionary Saving. Background Risk. Household Saving. Portfolio Choice. LDV Models.

AB Theory predicts that under certain restrictions on preferences prudent consumers will allocate relatively more funds to riskless assets when there is uninsurable background risk. This paper analyzes empirically the relevance of precautionary motives for the structure of household wealth. To this end, a new rich data source from the Netherlands is exploited. The question of primary concern is: what impact, if any, does the presence of income uncertainty have on the structure of Dutch households' portfolios? We employ various semi-parametric estimators, both for cross-sections and for panel data to assess the response of households' portfolios to uninsurable background risk. We find some, but not unanimous support for the view that portfolios become less risky as income uncertainty increases.

Hodrick, Robert J.

TI The Implications of First-Order Risk Aversion for Asset Market Risk Premiums. **AU** Bekaert, Geert; Hodrick, Robert J.; Marshall, David A.

Hoeberichts, Marco

TI Central Bank Independence: A Sensitivity Analysis. **AU** Eijffinger, Sylvester C. W.; Schaling, Eric; Hoeberichts, Marco.

TI Why Money Talks and Wealth Whispers: Monetary Uncertainty and Mystique. **AU** Eijffinger, Sylvester C. W.; Hoeberichts, Marco; Schaling, Eric.

Holden, Steinar

TI Business Cycles and Fiscal Policy in an Open Economy. **AU** Andersen, Torben M.; Holden, Steinar.

Holmstrom, Bengt

PD November 1996. **TI** Private and Public Supply of Liquidity. **AU** Holmstrom, Bengt; Tirole, Jean. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5817; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 44. **PR** \$5.00. **JE** E62, G32, G38. **KW** Liquidity. Private Assets. Production. Corporate Finance. Uncertainty.

AB This paper addresses a basic yet unresolved question: Do claims on private assets provide sufficient liquidity for an efficient functioning of the productive sector? Or does the state have a role in creating liquidity and regulating it either through adjustments in the stock of government securities or by other

means? In our model, firms can meet future liquidity needs in three ways: by issuing new claims and diluting old ones, by obtaining a credit line from a financial intermediary, and by holding claims on other firms. When there is no aggregate uncertainty, the authors show that these instruments are sufficient for attaining the socially optimal (second-best) contract between investors and firms. When there is only aggregate uncertainty, the private sector is no longer self-sufficient with regard to liquidity. The government can improve liquidity by issuing bonds that commit future consumer income. Government bonds commanded a liquidity premium over private claims.

Hooghiemstra, Jurjen S.

TI Decision Support System Help Rained to Search for Win-Win Solutions in Railway Network Design. **AU** Odijk, Michiel A.; Zwaneveld, Peter J.; Hooghiemstra, Jurjen S.; Kroon, Leo G.; Salomon, Marc.

TI Decision Support System Help Rained to Search for Win-Win Solutions in Railway Network Design. **AU** Odijk, Michiel A.; Zwaneveld, Peter J.; Hooghiemstra, Jurjen S.; Kroon, Leo G.; Salomon, Marc.

Host, Viggo

PD August 1997. **TI** Better Confidence Intervals for the Population Mean by Using Trimmed Means and the Iterated Bootstrap? **AA** University of Aarhus. **SR** Aarhus Department of Economics Working Paper: 1997/14; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. **PG** 16. **PR** no charge. **JE** C13, C15, C42, J30. **KW** Trimmed Means. PPS-Sampling. Iterated Bootstrap. Confidence Intervals. Wage Statistics.

AB In the quarterly Danish sample-based wage statistics, firms within a given industry are randomly selected with probabilities proportional to size. The hourly mean wage per employee is registered within each selected firm. Then the population mean per employee is estimated by the pps-estimator, i.e. the simple mean of the selected firm means per employee. I raise the question: Is it possible to produce better confidence intervals for the population mean by using trimmed means instead of the simple mean when the iterated bootstrap is used? Monte Carlo experiments indicate that it is the case.

Hoven, Christina

TI Medicaid and Service Use Among Homeless Adults. **AU** Glied, Sherry; Hoven, Christina; Moore, Robert; Garret, A. Bowen.

Huang, Deng-Shing

TI Business Groups and Trade in East Asia: Part I, Networked Equilibria. **AU** Feenstra, Robert; Huang, Deng-Shing; Hamilton, Gary G.

Hubbard, R. Glenn

TI Distributional Implications of Introducing A Broad-Based Consumption Tax. **AU** Gentry, William M.; Hubbard, R. Glenn.

Hueth, Brent

PD May 1998. **TI** Producer Price Risk and Quality

Measurement. AU Hueth, Brent; Ligon, Ethan. AA University of California, Berkeley. SR University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 840; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. PG 19. PR \$5.00 Domestic; \$10.00 International Surface Rate; not available after publication. JE E23, E31. KW Price Risk. Quality Measurement. Moral Hazard. Fruits Marketing. Vegetables Marketing.

AB The produce industry collectively solves an extremely complicated resource allocation problem in which risk-averse farmers grow a product whose market price is often unpredictable. Shippers or other intermediaries shield the farmer from much of the risk, permitting fairly efficient production. However, actual contracts between growers and shippers vary considerably across commodities in the residual price risk growers face. We hypothesize that imperfect quality measurement results in a moral hazard problem, and that idiosyncratic variation in the price of the produce provide additional information regarding quality. As a consequence, an efficient contract does not shield growers from all price risk. We examine this hypothesis for the case of fresh-market and processing tomatoes, and conclude that unobserved quality is capable of explaining observed variation in the price risk tomato growers face.

Huizinga, Harry

PD January 1997. TI Privatization, Public Investment, and Capital Income Taxation. AU Huizinga, Harry; Nielsen, Soren Bo. AA Huizinga: World Bank and Tilburg University. Nielsen: Copenhagen Business School. SR Tilburg Center for Economic Research Discussion Paper: 9709; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 18. PR no charge. JE D24, H21. KW Privatization. Capital Income Taxes.

AB This paper investigates the optimal boundary between the public and private production sectors. The government in effect determines which activities to maintain within the public sector and which ones to privatize. In choosing the sectoral boundary, the government trades off the relative inefficiency to marginal government production against the capital income tax distortions affecting private production. Optimally the government sector is shown to be too large in the sense that the government carries out some activities where it has an efficiency disadvantage vis-a-vis the private sector. Furthermore, it invests more in these activities than the private sector would do. These results are obtained in open economy and closed economy versions of the model.

PD April 1997. TI The Taxation of Interest in Europe: A Minimum Withholding Tax? AU Huizinga, Harry; Nielsen, Soren Bo. AA Huizinga: The World Bank, Center for Economic Research and Tilburg University. Nielsen: Copenhagen Business School. SR Tilburg Center for Economic Research Discussion Paper: 9773; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 30. PR no charge. JE F21, H21. KW Tax Competition. Interest Taxation.

AB This paper provides an analysis of the proposal introducing a minimum withholding tax on interest in the EU. We present a model with three countries: a typical EU country, an inside tax haven, and an outside tax haven. In the initial non-cooperative solution, the former two countries impose withholding taxes on interest. We investigate what happens to welfare in these countries, if the inside tax haven is forced to raise its withholding tax. From the model we proceed to a broader evaluation of the minimum withholding tax proposal.

PD June 1997. TI A Welfare Comparison of International Tax Regimes with Cross-Ownership of Firms. AU Huizinga, Harry; Nielsen, Soren Bo. AA Huizinga: Center for Economic Research and Tilburg University. Nielsen: Copenhagen Business School. SR Tilburg Center for Economic Research Discussion Paper: 9772; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 25. PR no charge. JE F21, H21. KW Tax Competition. Cross-Ownership.

AB This paper considers a world of many symmetric countries where public goods in principle are financed by taxes on saving, investments and pure profits. In theory, countries could use all three taxes in combination. In practice, however, the tax instrument set may be restricted by, for instance, tax evasion of a particular kind or some international agreement. This paper compares welfare levels if countries set taxes noncooperatively across different tax instrument sets. We find that depending on the strength of preferences for public goods, tax evasion that renders either saving or investment taxes infeasible may be welfare improving, if firms are in part foreign-owned.

Hulten, Charles R.

PD December 1996. TI Infrastructure Capital and Economic Growth: How Well You Use it May Be More Important Than How Much You Have. AA University of Maryland and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5847; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 37. PR \$5.00. JE D24, E22, H54, O16, O40. KW Productivity. Growth. Infrastructure. Investment. Africa.

AB This paper shows that those low and middle income countries that use infrastructure inefficiently pay a growth penalty in the form of a much smaller benefit from infrastructure investments. The magnitude of this penalty is apparent when the growth experience of Africa is compared with that of East Asia: over one-quarter of the differential growth rate between these two regions can be attributed to the difference in effective use of infrastructure resources. At the same time, the difference due to new public capital formation is negligible. An even stronger impression is conveyed by the comparison of high and low growth rate economies. Here, more than forty percent of the growth differential is due to the efficiency effect, making it the single most important explanatory factor of differential growth performance.

Inman, Robert P.

PD November 1996. TI Do Balanced Budget Rules Work? US Experience and Possible Lessons for the EMU. AA University of Pennsylvania and National Bureau of

Economic Research. **SR** National Bureau of Economic Research Working Paper: 5838; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 32. **PR** \$5.00. **JE** D78, F33, H61, H62, K23. **KW** Public Economics. Balanced Budget. Deficit. European Monetary Union.

AB The "Excessive Deficit Procedure" of the Maastricht Treaty on Economics and Monetary Union proposes two fiscal convergence conditions for entry and continued membership in the EMU: 1) a country's overall budget deficit for each fiscal year must be equal to or below 3% of GDP, and 2) a country's stock of gross public debt must be equal to or less than 60% of GDP. Will the current EMU Excessive Deficit Procedure work? When understood within the context of a political economy model of deficit behavior, recent U.S. evidence on budget rules strongly suggests that effective deficit constraints must use *ex post* deficit accounting, must be constitutionally grounded, must be enforced by an open and politically independent review panel or court with significant sanctions for violations, and costly to amend. Current EMU rules are not enforced, at present, by an open and politically independent review panel using significant penalties.

Irmen, Andreas

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

Irons, John S.

TI Can Government Gold Be Put to Better Use?: Qualitative and Quantitative Effects of Alternative Policies. **AU** Henderson, Dale W.; Irons, John S.; Salant, Stephen W.; Thomas, Sebastian.

Irwin, Douglas A.

PD January 1997. **TI** From Smoot-Hawley to Reciprocal Trade Agreements: Changing the Course of US Trade Policy in the 1930s. **AA** University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5895; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 47. **PR** \$5.00. **JE** F13, N72. **KW** Economic History. International Trade. Trade Policy. Tariffs. Great Depression.

AB Four years after passing the infamous Smoot-Hawley tariff in 1930, Congress enacted the Reciprocal Trade Agreements Act (RTAA), which gave the president the authority to undertake tariff-reduction agreements (without Congressional approval) with foreign countries. The resulting trade agreements reduced U.S. tariffs and culminated in the General Agreement on Tariffs and Trade (GATT) in 1947. Was the Great Depression responsible for bringing about this fundamental shift in U.S. trade policy? This paper analyzes the changes in U.S. trade policy during this period and argues that (I) the Depression as an international phenomenon motivated the unprecedented Congressional delegation of tariff-making powers, (II) economic changes more the result of World War II than the Depression blunted Republican opposition to the RTAA and ensured its post-war survival.

Iyigun, Murat F.

PD July 1997. **TI** Income Inequality and Macroeconomic Fluctuations. **AU** Iyigun, Murat F.; Owen, Ann L. **AA** Iyigun: Board of Governors of the Federal Reserve

System. Owen: Hamilton College. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 586; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us. **PG** 31. **PR** no charge. **JE** D31, E32. **KW** Income Inequality. Economic Fluctuations. Business Cycles. Credit Constraints.

AB When per capita income is low, increases in income inequality make macroeconomic cycles less severe. We present a model in which access to credit is based on earnings potential. If low as well as middle income individuals are credit constrained, increases in income inequality lead to smaller fluctuations in aggregate consumption and output. Empirical evidence from cross-country data supports the view that greater income inequality causes lower variation of real consumption and output growth in low income countries. When per capita income is high, however, this effect is reversed.

Jackman, Richard

PD June 1997. **TI** European Versus US Unemployment: Different Responses to Increased Demand for Skill? **AU** Jackman, Richard; Layard, Richard; Manacorda, Marco; Petrongola, Barbara. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 349; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 30. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** J31. **KW** Skill. Unemployment. Wages.

AB According to Paul Krugman, "the European unemployment problem and the U.S. inequality problem are two sides of the same coin". In other words, both continents have had the same shift in demand towards skill; in the U.S. relative wages have adjusted and in Europe not. The implication of this hypothesis is that in Europe the unemployment rate for the unskilled will have risen but the unemployment rate for the skilled will have fallen. In fact it has risen. To investigate the hypothesis more systematically we develop an internally consistent model which allocates the change in a country's unemployment between that resulting from (a) shifts in relative demand for skill minus shifts in relative supply, (b) shifts in the relative intercepts of skilled and unskilled wage functions, (c) shifts in aggregate wage pressure. We show that the rise in British unemployment relative to the U.S. since the 1970's is almost certainly due to shifts in aggregate wage pressure. Similarly for 5 other European countries the combination of (a) and (b) accounts for none of the increase in unemployment since the 1970's.

Jaeger, David A.

TI On the Validity of Season of Birth as an Instrument in Wage Equations: A Comment on Angrist and Krueger's "Does Compulsory School Attendance Affect Schooling and Earnings?" **AU** Bound, John; Jaeger, David A.

Jamal, Haroon

TI Measuring the Private Benefits from Connections to Public Water Systems in Developing Countries: A Case Study of the Punjab, Pakistan. **AU** Altaf, Mir Anjum; Jamal, Haroon; Liu, Jin Long; Smith, V. Kerry; Whittington, Dale.

Jansen, Jos

PD February 1997. **TI** Regulating Complementary Input Supply: Cost Correlation and Limited Liability. **AA** Center for Economic Policy Research and Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9720; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 29. **PR** no charge. **JE** D82, L23, L51, L90. **KW** Regulation. Products Correlation. Limited Liability. Complementary Inputs.

AB The regulator chooses for either a monopolist producing two complementary inputs in fixed proportion, or two independent firms producing one input each. The optimal regulatory choice depends on the correlation between the input production costs, and on the producers' liability structure. Full rent extraction is possible for independent firms with unlimited liability when costs are correlated. Under limited liability monopolistic input supply gives a higher expected welfare whenever the correlation coefficient is sufficiently small and nonnegative. For higher correlation coefficients independent input supply is chosen, and the regulatory scheme is non-monotonic in total costs.

Janssen, Fred

PD June 1997. **TI** The Optimal Number of Suppliers in an (s,Q) Inventory System with Order Splitting. **AU** Janssen, Fred; de Kok, Ton. **AA** Janssen: Tilburg University. de Kok: Eindhoven University of Technology. **SR** Tilburg Center for Economic Research Discussion Paper: 9761; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 24. **PR** no charge. **JE** E22. **KW** Inventory Model. Physical Stock. Backlog Level.

AB In this paper we present an (s,Q) inventory model with order splitting. Replenishing orders are split equally among n suppliers. Demand is modeled as a compound renewal process, and we consider independent identically distributed lead times for the suppliers. By extending results for the standard (s,Q) inventory model, we derive approximate expressions for the expected average physical stock level, the expected average backlog level, and the fraction of the time the physical stock is positive. The optimal values of the decision variables, the reorder point s , the replenishment quantity Q , and the number of suppliers n , are determined by minimizing the sum of ordering, holding, and shortage costs, where the emphasis is on the optimal number of suppliers.

PD June 1997. **TI** The Fill Rate Service Measure in an (s,Q) Inventory System with Order Splitting. **AU** Janssen, Fred; de Kok, Ton. **AA** Janssen: Tilburg University. de Kok: Eindhoven University of Technology. **SR** Tilburg Center for Economic Research Discussion Paper: 9762; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 14. **PR** no charge. **JE** E22. **KW** Inventory Model. Physical Stock. Fill Rate.

AB In this paper we derive expressions for the well-known fill rate service measure (P2-service measure) and the fraction of the time the physical stock is positive (P3-service measure) for the (s,Q) inventory model with order splitting. When order splitting is applied, replenishment orders are split equally

among n suppliers. Demand is modeled as a compound renewal process. Lead times of suppliers are independent and identically mixed Erlang distributed random variables. An approximation algorithm is derived to compute the optimal value of the reorder point s subject to a service level constraint. The algorithm is verified by simulation.

Jepsen, Gunnar Thorlund

PD July 1997. **TI** On the Effects of Drug Policy. **AU** Jepsen, Gunnar Thorlund; Skott, Peter. **AA** University of Aarhus. **SR** Aarhus Department of Economics Working Paper: 1997/15; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. **PG** 25. **PR** no charge. **JE** D43, D92, I18, K14, K32. **KW** Drugs. Enforcement Strategy. Addiction. Consumer Loyalty. Illicit Drugs. Transaction Costs.

AB This paper presents a simple analytical model of the market for hard drugs. The key assumptions are (i) a distinction between new users and existing addicts, (ii) imperfect competition, (iii) selective marketing efforts towards potential users, and (iv) the existence of policy effects on consumer loyalty as well as on the static price elasticity of demand facing individual suppliers at any given moment. It is shown that the long-run effects of stricter enforcement may be an increase in both the number of addicts and total consumption.

Jimeno, Juan F.

TI El Mercado de Trabajo Espanol y la Union Economica y Monetaria Europea. **AU** Vinals, Jose; Jimeno, Juan F.

Jones, Charles I.

TI The Productivity of Nations. **AU** Hall, Robert E.; Jones, Charles I.

Jorion, Philippe

TI A Century of Global Stock Markets. **AU** Goetzmann, William N.; Jorion, Philippe.

TI Re-emerging Markets. **AU** Goetzmann, William N.; Jorion, Philippe.

Jorn-Steffen, Pischke

TI Observations and Conjectures on the US Employment Miracle. **AU** Krueger, Alan B.; Jorn-Steffen, Pischke.

Jovanovic, Boyan

PD January 1997. **TI** Learning, Complementarities, and Asynchronous Use of Technology. **AU** Jovanovic, Boyan; Stolyarov, Dmitriy. **AA** Jovanovic: New York University and National Bureau of Economic Research. Stolyarov: University of Pennsylvania. **SR** National Bureau of Economic Research Working Paper: 5870; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** D24, D83, L23, O33. **KW** Productivity. Technology. Learning.

AB This paper deals with processes that require several complementary inputs subject to improvements in quality. If after a quality upgrade one of these inputs requires a period of learning before it can be used effectively, then in general it will pay to purchase the inputs at different dates -- the purchases will be asynchronous. That is so because it is wasteful to tie up funds in the other inputs which will be underutilized until the

date learning is over. The authors provide evidence that technology has been used synchronously in the automobile industry, in the television broadcasting industry, in electricity supply, and in railways, and they argue that their model helps explain this evidence.

PD January 1997. **TI** Solow vs. Solow: Machine Prices and Development. **AU** Jovanovic, Boyan; Rob, Rafael. **AA** Jovanovic: New York University and National Bureau of Economic Research. Rob: University of Pennsylvania. **SR** National Bureau of Economic Research Working Paper: 5871; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** O16, O31, O40. **KW** Productivity. Investment. Development. Technology. Growth.

AB Machines are more expensive in poor countries, and the relation is pronounced. It is hard for a Solow (1956) type of model to explain the relation between machine prices and GDP given that in most countries equipment investment is under 10% of GDP. A stronger relation emerges in a Solow (1959) type of vintage model in which technology is embodied in machines.

Kabir, Rezaul

PD February 1997. **TI** New Evidence on Price and Volatility Effects of Stock Option Introductions. **AA** Tilburg University and University of Antwerp. **SR** Tilburg Center for Economic Research Discussion Paper: 9737; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 24. **PR** no charge. **JE** G13, G14, G15. **KW** Option Listing. Stock Price. Stock Volatility.

AB The empirical evidence on the effect of options trading on the underlying stocks primarily comes from the United States. The existing literature is surveyed by Damodaran and Subrahmanyam (1992). They find a consistent evidence of positive excess returns with the introduction of call options and negative excess returns with the introduction of put options. They also find strong evidence of a decline of stock volatility after option listing. It is interesting to examine if markets other than the United States exhibit similar results. This paper, therefore, adds to the literature by examining data from the Dutch market. The paper is also distinct from prior studies in two more aspects: (a) both stock return and volatility effects are examined; and (b) three different samples are separately investigated. In significant contrast to previous results, we find a decline in stock prices associated with the introduction of options trading. The excess return in the 20-day pre-listing period amounts to statistically significant -2.34%. We also observe a significantly negative price effect (-4.4%) during the post-listing period. The finding is robust to different methodologies or samples. In analyzing the effect on stock volatility, three different measures of volatility are examined over different time intervals.

PD June 1997. **TI** The Value Relevance of Dutch Financial Statement Numbers for Stock Market Investors. **AA** Tilburg University and University of Antwerp. **SR** Tilburg Center for Economic Research Discussion Paper: 9758; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm.

PG 24. **PR** no charge. **JE** M40, M41. **KW** Financial Reporting. Capital Market. Information Contest. Earnings Response.

AB Much of the literature on stock market evaluation of financial statement information focuses on the U.S. data. But, the U.S. market can be characterized as the one with rigid disclosure guidelines. This study provides direct evidence from the Netherlands -- a country with a less rigid disclosure environment and a different corporate governance structure. The information content of annual and semi-annual earnings announcements is tested by examining both daily share price and trading volume data. The long-term association between stock returns and some major accounting variables is also investigated. The evidence provided in this paper suggests that financial statement numbers are indeed value relevant and the extent of their usefulness to stock market investors is not that modest as is often perceived.

Kalnins, Arturs

PD December 1996. **TI** The Characteristics of Multi-Unit Ownership in Franchising: Evidence from Fast-Food Restaurants in Texas. **AU** Kalnins, Arturs; Lafontaine, Francine. **AA** University of Michigan and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5859; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 37. **PR** \$5.00. **JE** D40, D80, L23, L80. **KW** Industrial Organization. Franchises. Monitoring. Market Expertise.

AB One empirical phenomenon that has received little attention in the franchising literature is the tendency for individual franchisees to own not just one, but several units of a given franchised chain. Given the existence of multi-unit owners, most of the current theories have implications for the extent to which units owned by a single owner should be 1) geographically near each other, 2) located in areas where populations display similar demographic characteristics, and 3) contiguous to each other, that is, should share a market boundary. This paper provides evidence that suggests among other things that franchising is not a strategic delegation device, and that the location of units is not determined by the franchisee's desire to diversify away risk. Instead, the minimization of monitoring or free-riding costs and the franchiser's reliance on the franchisee's local market expertise appear to be central concerns in the allocation of units across franchisees.

Kalwij, Adriaan

PD August 1997. **TI** Household Commodity Demand and Demographics in the Netherlands: A Microeconomic Analysis. **AU** Kalwij, Adriaan; Alessie, Rob J. M.; Fontein, Peter. **AA** Center for Economic Research and Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9776; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 28. **PR** no charge. **JE** C30, D12. **KW** Demand Systems. Consumption. Demographics.

AB We investigate the effects of demographics, household expenditure and female employment on the allocation of household expenditure to consumer goods. For this purpose we estimate an Almost Ideal Demand System based on Dutch

micro data. We find that interactions between household expenditure and demographics are of significant importance in explaining the allocation to consumer goods. As a consequence, consumer goods such as housing and clothing change with demographic characteristics from luxuries to necessities. Furthermore, this implies that budget and price-elasticities cannot be consistently estimated from aggregated data and that equivalence scales are not identified from budget survey data alone. We reject weak separability of consumer goods from female employment. A couple with an employed spouse has a smaller budget share for housing and personal care and a larger budget share for education, recreation and transport and clothing compared to a couple with a non-employed spouse.

Kamin, Steven B.

PD May 1997. **TI** Output and the Real Exchange Rate in Developing Countries: An Application to Mexico. **AU** Kamin, Steven B.; Rogers, John H. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 580; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us. **PG** 65. **PR** no charge. **JE** F31. **KW** Contradictory Devaluation. Mexico.

AB Since Mexico's devaluation of the peso in 1994, some observers have called for policies designed to keep the real exchange rate highly competitive in order to promote exports and output growth. However, over the past few decades, devaluations of the real exchange rate have been associated nearly exclusively with economic contraction, while real appreciations have been followed almost invariably by expansions in economic activity. The purpose of this paper is to attempt to disentangle the possible factors underlying this correlation -- (1) reverse causation from output to the real exchange rate, (2) spurious correlation with third factors such as capital account shocks, and (3) temporary contractionary effects of devaluation--and determine whether, once those factors are accounted for, a positive, long-run effect of real depreciation on output can be identified in the data. Based on the results of a VAR model designed to explore the linkages between the real exchange rate and output, we conclude that even after sources of spurious correlation and reverse causation are controlled for, real devaluation has led to high inflation and economic contraction in Mexico. We view our findings as pointing to substantial risks to targeting the exchange rate at too competitive a level.

PD June 1997. **TI** Capital Inflows, Financial Intermediation, and Aggregate Demand: Empirical Evidence from Mexico and other Pacific Basin Countries. **AU** Kamin, Steven B.; Wood, Paul R. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 583; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us. **PG** 63. **PR** no charge. **JE** E22. **KW** Capital Flows. Mexico.

AB In trying to explain the balance-of-payments and banking crises of 1994-95 that erupted in Mexico, observers have pointed to various effects of the substantial capital inflows that took place in the preceding half decade. It has been argued that these inflows contributed to rapid monetary growth, real appreciation of the peso, and the widening of Mexico's current

account deficit. In addition, by making available credit for consumption loans at a time when investment spending in Mexico was not yet ready to grow rapidly, these inflows may have contributed to the fall in Mexico's savings rate. This paper looks at the effect of capital flows on macroeconomic and financial variables in Mexico during the 1980's and 1990's and compares Mexico's experience with that of a cross-section of Pacific Basin countries. In particular, we attempt to gauge the effect of capital flows on money growth, interest rates, consumption and investment. We do find evidence of an independent effect of capital flows on monetary conditions and domestic demand, controlling for certain other domestic factors. However, these inflows appear not to have altered substantially the basic trajectories of money, consumption, and investment in the recipient countries.

Kamp, Bart

TI Application of Neural Networks to House Pricing and Bond Rating. **AU** Daniels, Hennie; Kamp, Bart; Verkooijen, William.

Kane, Edward J.

TI The Demise of Double Liability as an Optimal Contract for Large-Bank Stockholders. **AU** Wilson, Berry K.; Kane, Edward J.

Kang, Jun-Koo

PD November 1996. **TI** The Underreaction Hypothesis and the New Issue Puzzle: Evidence from Japan. **AU** Kang, Jun-Koo; Stulz, Rene M.; Kim, Yong-Cheol. **AA** Kang: Korea University. Stulz: Harvard University and National Bureau of Economic Research. Kim: Clemson University. **SR** National Bureau of Economic Research Working Paper: 5819; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** \$5.00. **JE** D20, G32. **KW** Japan. Convertible Debt. Equity. Underreaction Hypothesis. Corporate Finance.

AB This paper investigates the long-term performance of Japanese firms issuing convertible debt or equity. We find that these firms perform poorly even though the stock-price reaction to convertible debt and equity issue announcements is not significantly negative for Japanese firms and Japanese firms do not issue equity or convertible debt following strong positive abnormal returns. Whereas in the U.S. underperformance appears to be concentrated in the smaller firms and in the firms with a high market-to-book ratio, this is not the case in Japan. The underperformance of Japanese issuing firms cannot be understood in terms of the underreaction hypothesis that some have advanced as an explanation for the poor returns of U.S. issuing firms.

Kantor, Shawn Everett

TI The Adoption of Workers' Compensation in the United States, 1900- 1930. **AU** Fishback, Price V.; Kantor, Shawn Everett.

Kapteyn, Arie

TI Social Interactions and Habit Formation in a Model of Female Labor Supply. **AU** Woittiez, Isolde; Kapteyn, Arie.

TI Mandatory Pensions and Personal Savings in the Netherlands. **AU** Alessie, Rob J. M.; Kapteyn, Arie; Klijn,

Frank.

TI Female Labor Supply and the Demand for Housing.
AU Aldershof, Trea; Alessie, Rob J. M.; Kapteyn, Aric.

Karatzas, Ioannis

PD August 1997. **TI** A Stochastic Infinite-Horizon Economy with Secured Lending, or Unsecured Lending and Bankruptcy. **AU** Karatzas, Ioannis; Shubik, Martin; Sudderth, William D. **AA** Karatzas: Columbia University. Shubik: Yale University. Sudderth: University of Minnesota. **SR** Yale Cowles Foundation Discussion Paper: 1156; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 34. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** C73, E41. **KW** Second Lending. Stochastic Games. Money Theory.

AB Modeling problems for a monetary economy are discussed and some examples are presented in the context of an infinite-horizon economy with one or two types of traders, who use fiat money to buy a single perishable consumption good. Three instances are considered, all with transactions in fiat money. The first model has no borrowing or lending. The second model permits both borrowing and lending, but all loans are secured. The third model has borrowing and unsecured lending, and takes into account the presence of debtors who are unable to honor their debts and go bankrupt. Borrowing and depositing take place through an outside bank, although in some circumstances a money market could be used instead. Conditions for different forms of lending are discussed. This is a survey of three technical papers, where the mathematical models are developed in detail and the proofs are supplied.

Karp, Larry

PD November 1997. **TI** Common Ground Between Free-Traders and Environmentalists. **AU** Karp, Larry; Sacheti, Sandeep; Zhao, Jinhua. **AA** Karp: University of California, Berkeley. Sacheti: American Express. Zhao: Iowa State University. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 817; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 45. **PR** \$11.50 Domestic; \$22.50 International Surface Rate; not available after publication. **JE** F10, Q20. **KW** Free Trade. Environmental Economics. Trade Liberalization. Property Rights.

AB We use a North-South model with property right differences and resource dynamics to study the effects of trade on resource use and welfare. Autarky is likely to Pareto-dominate free trade in the long run when the environment is quite fragile, and the result is reversed when the environment is quite resilient. Trade may cause an environmentally poor country to drag down its richer trading partner; in this case, both countries degrade their stocks when these would be preserved under autarky. Alternatively, trade may enable the environmentally richer country to pull up its partner; in this case both countries preserve their stocks when these would be degraded under autarky. These results rationalize the positions of environmentalists and free-traders. The direction of trade may change over time, but in steady state it is either inefficient or indeterminate. In the former case, a switch to autarky would increase global welfare.

PD March 1998. **TI** Nonpoint Source Pollution Taxes and Excessive Tax Burden. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 835; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 26. **PR** \$6.50 Domestic; \$13.00 International Surface Rate; not available after publication. **JE** H29. **KW** Nonpoint Source Pollution. Taxation. Ambient Tax. Moral Hazard. Differential Games.

AB If a regulator is unable to measure firms' individual emissions, an ambient tax can be used to achieve the socially desired level of pollution. With this tax, each firm pays a unit tax on aggregate emissions. In order for the tax to be effective, firms must recognize that their decisions affect aggregate emissions. When firms behave strategically with respect to the tax-setting regulator, under plausible circumstances their tax burden is lower under an ambient tax, relative to the tax which charges firms on the basis of individual emissions. In these circumstances, the problem of excessive tax burden, or budget imbalance does not arise.

PD May 1998. **TI** Unemployment and the Labor Management Conspiracy. **AU** Karp, Larry; Thierry, Paul. **AA** Karp: University of California, Berkeley. Thierry: GREQAM and University of Grenoble II. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 841; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 38. **PR** \$9.50 Domestic; \$19.00 International Surface Rate; not available after publication. **JE** J58, J68. **KW** Unemployment. Government Subsidies. Wage Bargaining. Labor Unions.

AB We study a model in which management and a union bargain sequentially, first choosing a rule that will later determine the level of employment, and then choosing a wage. The government then chooses an output or an employment subsidy. An exogenous natural turnover rate in the unionized sector creates unemployment whenever the union wage exceeds the competitive wage. Government intervention can increase both the equilibrium amount of unemployment and worsen the intersectoral allocation of labor, because of the induced change in the endogenous wage. Unemployment weakens but does not eliminate the possibility of a labor management conspiracy.

Katz, Lawrence F.

TI What We Know and Do Not Know About the Natural Rate of Unemployment. **AU** Blanchard, Olivier; Katz, Lawrence F.

TI A Distinctive System: Origins and Impact of US Unemployment Compensation. **AU** Baicker, Katherine; Goldin, Claudia; Katz, Lawrence F.

TI Computing Equality: Have Computers Changed the Labor Market. **AU** Autor, David H.; Katz, Lawrence F.; Krueger, Alan B.

Kawuryan, Anna Maria Siti

PD March 1998. **TI** Educational Achievement and Sectoral Transition in the Indonesian Labor Force.

AA University of Minnesota. **SR** University of Minnesota Economic Development Center Bulletin: 98/03; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 51. **PR** no charge. **JE** I21, J21, J22, O15. **KW** Economic Development. Educational Investment. Labor Force Structure. Indonesia.

AB This study examines the effects of educational achievement on structural transition in the Indonesian labor force during the process of recent economic development. The results show that first, between 1976 and 1989, there was a significant increase in the educational achievement of the Indonesian labor force. While still lagging behind, women's educational achievement grew more rapidly than men's. Second, between 1960 and the mid 1970's, the labor force share of agriculture dropped from 75% to 51%. Between 1976 and the early 1990's, the labor force share of agriculture remained dominant at around 51%. In a longer time perspective, the Indonesian labor force has begun to undergo a structural transition. Third, education increases the likelihood of full time work. Fourth, for 1976 and 1989, labor force participation rates were lower for women than for men. Self employment remained dominant for men and women, a likely result of the dominance of agriculture.

Kehoe, Patrick J.

TI Sticky Price Models of the Business Cycle: Can the Contract Multiplier Solve the Persistence Problem? **AU** Chari, V. V.; McGrattan, Ellen R.; Kehoe, Patrick J.

TI Monetary Shocks and Real Exchange Rates in Sticky Price Models of International Business Cycles. **AU** Chari, V. V.; Kehoe, Patrick J.; McGrattan, Ellen R.

Keller, Godfrey

PD July 1997. **TI** Optimal Experimentation in a Changing Environment. **AU** Keller, Godfrey; Rady, Sven. **AA** Keller: London School of Economics. Rady: Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1443; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 31. **PR** no charge. **JE** C61, D42, D83, L12. **KW** Bayesian Learning. Optimal Control. Monopoly Experimentation.

AB This paper studies optimal experimentation by a monopolist who faces an unknown demand curve subject to random changes, and who maximizes profits over an infinite horizon in continuous time. The authors show that there are two qualitatively very different regimes, determined by the discount rate and the intensities of demand curve switching, and the dependence of the optimal policy on these parameters is discontinuous. One regime is characterized by extreme experimentation and good tracking of the prevailing demand curve, the other by moderate experimentation and poor tracking. Moreover, in the latter regime the agent eventually becomes 'trapped' into taking actions in a strict subset of the feasible set.

Kim, Minseong

TI Predation and Moral Decay. **AU** Grossman, Herschel; Kim, Minseong.

Kim, Yong-Cheol

TI The Underreaction Hypothesis and the New Issue Puzzle: Evidence from Japan. **AU** Kang, Jun-Koo; Stulz, Rene M.; Kim, Yong-Cheol.

Kleijnen, Jack P. C.

PD June 1997. **TI** Experimental Design for Sensitivity Analysis, Optimization, and Validation of Simulation Models. **AA** CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9752; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 61. **PR** no charge. **JE** C10. **KW** Least Squares. Non-Parametric. Stopping Rule. Median. Seed. Likelihood Ratios. Sensitivity Analysis.

AB This chapter gives a survey on the use of statistical designs for what-if analysis in simulation, including sensitivity analysis, optimization, and validation/verification. Sensitivity analysis is divided into two phases. The first phase is a pilot stage, which consists of screening or searching for the important factors among (say) hundreds of potentially important factors. A novel screening technique is presented, namely sequential bifurcation. The second phase uses regression analysis to approximate the input/output transformation that is implied by the simulation model; the resulting regression model is also known as a metamodel or a response surface. Regression analysis gives better results when the simulation experiment is well designed, using either classical statistical designs (such as fractional factorials) or optimal designs (such as pioneered by Fedorov, Kiefer, and Wolfowitz). To optimize the simulated system, the analysts may apply Response Surface Methodology (RSM); RSM combines regression analysis, statistical designs, and steepest-ascent hill-climbing. To validate a simulation model, again regression analysis and statistical designs may be applied. Several numerical examples and case-studies illustrate how statistical techniques can reduce the ad hoc character of simulation; that is, these statistical techniques can make simulation studies give more general results, in less time.

Kleiner, Morris M.

PD January 1997. **TI** Does Regulation Improve Outputs and Increase Prices? The Case of Dentistry. **AU** Kleiner, Morris M.; Kudrle, Robert T. **AA** University of Minnesota and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5869; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** I12, J51, L51. **KW** Labor Studies. Dentistry. Occupational Licensing. Regulations. Health Care.

AB This study examines the role of variations in occupational licensing policies and practices in improving the outputs of services provided to consumers, and the effect of restrictive regulations on the prices of certain services. Theory suggests that more restrictive licensing may raise prices, but that it may also raise demand by reducing uncertainty about the competency of the services. This paper uses unique data on the dental health of incoming Air Force personnel to empirically analyze the effects of varying licensing stringency among the states. The authors find that tougher licensing does not lead to improved outputs, but does raise prices. These results cast

doubt on the principal public interest argument in favor of the impact of more strenuous licensing practices of the more restrictive states.

Klemperer, Paul

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

Kliemt, Hartmut

TI Trust in the Shadow of the Courts. **AU** Brennan, Geoffrey; Guth, Werner; Kliemt, Hartmut.

Klijn, Frank

TI Mandatory Pensions and Personal Savings in the Netherlands. **AU** Alessie, Rob J. M.; Kapteyn, Aric; Klijn, Frank.

Knetter, Michael M.

TI An International Comparison of Employment Adjustment to Exchange Rate Fluctuations. **AU** Burgess, Simon; Knetter, Michael M.

TI Goods Prices and Exchange Rates: What Have We Learned? **AU** Golberg, Pinelopi K.; Knetter, Michael M.

PD January 1997. **TI** The Segmentation of International Markets: Evidence from "The Economist". **AA** Dartmouth College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5878; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 28. **PR** \$5.00. **JE** F13, F14, F31, L10, L82. **KW** International Trade. Investment. Exchange Rates. Price Discrimination. Market Segmentation.

AB This paper studies the behavior of newsstand prices for "The Economist" magazine in eight markets. Substantial variations in markups across markets are related to exchange rate fluctuations. Some of this variation can be traced to menu costs. However, much of the variation appears to result from intentional price discrimination across three regions: the U.S., the UK, and Continental Europe and Scandinavia. Differences in demand elasticities can plausibly be attributed to differences in preferences and the set of competing products across markets. Segmentation of the markets is facilitated by the time-sensitive nature of the product which makes arbitrage very costly.

Koh, Youngsun

TI Liberalization of Capital Flows in Korea: Big-Bang or Gradualism? **AU** Cho, Dongchul; Koh, Youngsun.

Koop, Gary

TI A Stochastic Frontier Analysis of Output Level and Growth in Poland and Western Economies. **AU** Osiewalski, Jacek; Koop, Gary; Steel, Mark F. J.

Kornai, Janos

PD November 1996. **TI** Paying the Bill for Goulash-Communism: Hungarian Development and Macro Stabilization in a Political-Economy Perspective. **AA** Harvard University and Collegium Budapest Institute for Advanced Study. **SR** University of Western Ontario Papers in Political Economy: 77; Department of Economics, Social Science

Center, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.soc1.uwo.ca/economics. **PG** 88. **PR** no charge. **JE** Not available. **KW** Not available.

AB Not available.

Kort, Peter

TI Environmental Policy in an International Duopoly: An Analysis of Feedback Investment Strategies. **AU** Feenstra, Talitha; Kort, Peter; de Zeeuw, Aart.

Krinsky, Itzhak

TI Information, Transaction Costs, and Patterns in Stock Returns After Earnings Announcements. **AU** Bartov, Eli; Krinsky, Itzhak; Radhakrishnan, Suresh.

TI Determinants of Alternative Corporate Payout Mechanisms: Cash- Dividend Increases and Open-Market-Repurchase Initiations. **AU** Bartov, Eli; Krinsky, Itzhak; Lee, Jason.

Krueger, Alan B.

PD January 1997. **TI** Labor Market Shifts and the Price Puzzle Revisited. **AA** Princeton University and National Bureau of Economic Research. **SR** Princeton Industrial Relations Section Working Paper: 375; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 31. **PR** \$1.50. **JE** D40, E31, J31, L60. **KW** Wages. Prices. Stolper-Samuelson.

AB This paper examines the relationship between price growth and skill intensity across 150 manufacturing industries between 1989 and 1995. There are two main findings. First, wage growth and intermediate goods price increases are passed through to final product prices roughly in proportion to their factor shares. Second, product prices have grown relatively less in sectors that more intensively utilize less-skilled labor. The latter finding is consistent with the Stolper-Samuelson theory of expanded trade with countries that are abundant in less-skilled workers, as well as with some models of technological change.

PD January 1997. **TI** Accounting for the Slowdown in Employer Health Care Costs. **AU** Krueger, Alan B.; Levy, Helen. **AA** Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5891; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 28. **PR** \$5.00. **JE** I11, I18, J32. **KW** Health Care. Insurance. Managed Care. Labor Costs.

AB The most widely used measure of employer health care costs, the health insurance component of the Employment Cost Index, indicates that cost growth has decelerated since 1989. In recent years employer expenditures per hour worked have even declined in nominal dollars. This paper analyzes the components of changes in employers' health care costs over the 1992-94 and 1987-93 periods. The authors find that employer costs have decreased primarily as a result of a steady decrease in the fraction of workers with coverage and a large decrease in the rate of growth of insurance premiums. They conclude that the shift to managed care does not appear to be directly responsible for significant cost savings because managed care premiums are almost as high as those for fee-for-service plans, on average. Finally, the authors note that there is a significant need for improved data collection in this area.

TI Computing Equality: Have Computers Changed the Labor Market. **AU** Autor, David H.; Katz, Lawrence F.; Krueger, Alan B.

PD May 1997. **TI** Experimental Estimates of Education Production Functions. **AA** Princeton University and National Bureau of Economic Research. **SR** Princeton Industrial Relations Section Working Paper: 379; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 52. **PR** \$2.00. **JE** I21, J24. **KW** Education. Production Function. Class Size. Random Assignment.

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 (13-17 students), regular size classes (22-25 students), and regular size classes with a teacher's aide. According to the original design, students were to remain in their initial class type through the third grade. The main conclusions are: (1) on average, performance on standardized tests increases by about 4 percentile points the first year students are assigned to a small class; (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's 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.

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.

PD August 1997. **TI** Observations and Conjectures on the US Employment Miracle. **AU** Krueger, Alan B.; Jorn-Steffen, Pischke. **AA** Krueger: Princeton University and National Bureau of Economic Research. Jorn-Steffen: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** Princeton Industrial Relations Section Working Paper: 390; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 40. **PR** \$1.50. **JE** E24, J23, J31. **KW** Employment. Unemployment. Wage Rigidity.

AB This paper has three goals. First, to place U.S. job growth in an international perspective by exploring cross-country differences in employment and population growth. This section finds that the U.S. 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. The slow growth in employment in many European countries appears too uniform across skill groups to result from relative wage inflexibility alone. Furthermore, a great deal of labor market adjustment seems to take place at a constant real wage in the U.S. Third, to speculate on other explanations why the U.S. has managed to successfully absorb so many new entrants to the labor market.

PD December 1997. **TI** Assessing Bias in the Consumer Price Index from Survey Data. **AU** Krueger, Alan B.; Siskind, Aaron. **AA** Krueger: Princeton University and National Bureau of Economic Research. Siskind: Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 392; Industrial Relations Section, Department

of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 23. **PR** \$1.00. **JE** D31, E31. **KW** Consumer Price Index. Real Income. Income Distribution.

AB This paper compares self-reported changes in families' financial status to actual changes based on annual time-series data calculated from the PSID. The results indicate that the Consumer Price Index does a reasonably accurate job reconciling self-reported changes in financial status with measured changes in real income. Earlier work by Nordhaus (1998) reached a different conclusion because it did not account for changes in the shape of the income distribution.

TI A Reanalysis of the Effect of the New Jersey Minimum Wage Increase on the Fast-Food Industry with Representative Payroll Data. **AU** Card, David; Krueger, Alan B.

PD January 1998. **TI** Reassessing the View that American Schools Are Broken. **AA** Princeton University and National Bureau of Economic Research. **SR** Princeton Industrial Relations Section Working Paper: 395; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 36. **PR** \$1.50. **JE** H52, I21, I22, I28, J31. **KW** Education. Production Function. Wages. Human Capital.

AB This paper evaluates evidence on the effectiveness of elementary and secondary schooling in the U.S. Contrary to popular perception, most standardized test scores have not declined in the last quarter century, and the National Assessment of Educational Progress (NAEP) data show a modest upward trend. In addition, school spending per pupil and NAEP scores exhibit a positive correlation in the aggregate data. A review of the Tennessee Student Teacher Achievement Ratio (STAR) experiment indicates that students who were randomly assigned to smaller classes performed better on standardized tests. Evidence also suggests that students from low socioeconomic status families learn just as much during the school year as students from high socioeconomic status families, but students from low socioeconomic status families fall behind during the summer months. Finally, the earnings of high school graduates relative to high school dropouts increased substantially between 1979 and 1996.

Krueger, Anne O.

PD January 1997. **TI** Trade Policy and Economic Development: How We Learn. **AA** Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5896; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 50. **PR** \$5.00. **JE** F13, F41, F43, N70, O19. **KW** International Trade. Development. Growth. Economic History.

AB Ideas with regard to trade policy and economic development have changed radically since the 1950's. Then and now, it was recognized that trade policy was central to the overall design of policies for economic development. But in the early days, there was a broad consensus that trade policy for development should be based on "import-substitution." It is now widely accepted that growth prospects for developing countries are greatly enhanced through an outer-oriented trade regime and fairly uniform incentives for production across exporting and import competing goods. This paper addresses the changes in thought and policy. In this paper, the author first sketches the initial approach to trade policy in early

development research and thought. Next, consideration is given to the evolution of thought, research, and experience with respect to trade and development over the next several decades, and to the conventional wisdom of the 1990s.

Kudrle, Robert T.

TI Does Regulation Improve Outputs and Increase Prices? The Case of Dentistry. **AU** Kleiner, Morris M.; Kudrle, Robert T.

Kultti, Klaus

PD March 1997. **TI** A Model of Random Matching and Price Formation. **AA** CentER for Economic Research and Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9732; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 36. **PR** no charge. **JE** C78, D40, D44, D83. **KW** Random Matching, Bargaining, Auctions, Evolutionary Stability.

AB We study a model where agents willing to trade meet randomly. There are two types of agents of whom some have an indivisible object and some a perfectly divisible object for sale. The reservation value of the former type is zero, and the latter type value the indivisible object at unity. The meeting probabilities are endogenous and are derived from the basics of the model. The agents can decide to either search or wait. The searchers are distributed randomly on the waiters. Prices are determined by bargaining if exactly two agents are matched. If more than one agent of one type are matched with an agent of another type an auction ensues. There exist potentially three equilibria whose stability is studied in evolutionary dynamics. We also use the model to identify frictions that are responsible for non-Walrasian outcomes.

PD June 1997. **TI** Price Formation by Bargaining and Posted Prices. **AA** CentER for Economic Research and Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9756; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 21. **PR** no charge. **JE** C78, D40, D44. **KW** Bargaining, Posted Prices, Random Matching.

AB We study markets with two types of agents. Sellers have an indivisible good for sale, and their reservation value is zero. Buyers are randomly matched with sellers, and they value the good at unity. Sellers may be matched with any positive number of buyers, and they may choose to determine the price of the good either by bargaining or by posting prices. These choices are relevant only when a seller meets exactly one buyer. If two or more buyers are matched to a seller the buyers engage in an auction. The agents may choose whether to go to markets with bargaining or posted prices. We show that both market structures are equilibria but that they do not co-exist. Markets with posted prices are shown to be the unique evolutionary stable equilibrium.

PD June 1997. **TI** Equivalence of Auctions and Posted Prices. **AA** CentER for Economic Research and Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9757; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website:

cwis.kub.nl/few5/center/center.htm. **PG** 10. **PR** no charge. **JE** C73, C78, D44. **KW** Auctions, Posted Prices, Random Matching.

AB We determine the equilibrium in two transaction mechanisms: auctions and posted prices. Agents choose whether to participate in markets where sellers post prices. We show that the selling mechanisms are practically equivalent. Previous studies have shown that auction markets emerge as a unique evolutionary stable equilibrium when compared to bargaining markets. Posted price market dominate bargaining markets similarly.

PD July 1997. **TI** Scale Returns of a Random Matching Model. **AA** CentER for Economic Research, Tilburg University and University of Helsinki. **SR** Tilburg Center for Economic Research Discussion Paper: 9771; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 6. **PR** no charge. **JE** C78, J41. **KW** Random Matching, Scale Returns.

AB This note considers a random matching model in which the meeting probabilities can be derived from the basics of the model. We determine conditions for the matching technology to exhibit decreasing, constant, and increasing returns to scale.

La Porta, Rafael

PD December 1996. **TI** Trust in Large Organizations. **AU** La Porta, Rafael; Lopez-de-Silanes, Florencio; Shleifer, Andrei; Vishny, Robert W. **AA** La Porta, Shleifer, and Lopez-de-Silanes: Harvard University and National Bureau of Economic Research. Vishny: University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5864; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 8. **PR** \$5.00. **JE** D70, L11, L23, P51. **KW** Corporate Finance, Trust, Cooperation, Organization Size.

AB Several authors suggest that trust is an important determinant of cooperation between strangers in a society, and therefore of performance of social institutions. The authors argue that trust should be particularly important for the performance of large organizations. In a cross-section of countries, evidence on government performance, participation in civic and professional societies, importance of large firms, and the performance of social institutions more generally supports this hypothesis. Moreover, trust is lower in countries with dominant hierarchical religions, which may have deterred "horizontal networks of cooperation" between people. In sum, theories of trust hold up remarkably well on a cross-section of countries.

PD January 1997. **TI** Legal Determinants of External Finance. **AU** La Porta, Rafael; Lopez-de-Silanes, Florencio; Shleifer, Andrei; Vishny, Robert W. **AA** La Porta, Shleifer, and Lopez-de-Silanes: Harvard University and National Bureau of Economic Research. Vishny: University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5879; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 21. **PR** \$5.00. **JE** G32, G38, K22, P51. **KW** Corporate Finance, Law, Capital Markets.

AB Using a sample of 49 countries, the authors show that countries with poorer investor protections, measured by both

the character of legal rules and the quality of law enforcement, have smaller and narrower capital markets. These findings apply to both equity and debt markets. In particular, French civil law countries have both the weakest investor protections and the least developed capital markets, especially as compared to common law countries.

Lafontaine, Francine

TI The Characteristics of Multi-Unit Ownership in Franchising: Evidence from Fast-Food Restaurants in Texas. **AU** Kalnins, Arturs; Lafontaine, Francine.

Lago, Ricardo

TI A Portfolio Approach to a Cross-Sectoral and Cross-National Investment Strategy in Transition Economies. **AU** Buiter, Willem H.; Lago, Ricardo; Rey, Helene.

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

Lambert, Sylvie

TI Why Do Migrants Remit? An Analysis for the Dominican Sierra. **AU** de la Briere, Benedicte; de Janvry, Alain; Lambert, Sylvie; Sadoulet, Elisabeth.

TI Why Do Migrants Remit? An Analysis for the Dominican Sierra. **AU** de la Briere, Benedicte; de Janvry, Alain; Lambert, Sylvie; Sadoulet, Elisabeth.

Lariviere, Martin A.

PD August 1997. **TI** Stalking Information: Bayesian Inventory Management With Unobserved Lost Sales. **AU** Lariviere, Martin A.; Porteus, Evan L. **AA** Lariviere: Duke University. Porteus: Stanford Business School. **SR** Stanford Graduate School of Business Research Paper: 1367R2; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 30. **PR** no charge. **JE** D11, D21, D83, E22. **KW** Inventory Management. Lost Sales. Information Acquisition. Dropping Products. Dimensionality Reduction.

AB Retailers are frequently uncertain about the underlying demand distribution of a new production. When taking the empirical Bayesian approach of Scarf (1959), they simultaneously stock the product over time and learn about the distribution. The authors present examples that reveal two interesting phenomena: (1) The retailer may prefer that customers not buy everything stocked, even though doing so would signal a stochastically larger demand distribution, and (2) it can be optimal to drop a product after a period of successful sales. The authors also present specific conditions under which the following results hold: (1) Investment in excess stocks to enhance learning will occur in every dynamic problem, and (2) a product is never dropped after a period of poor sales. The model is extended to multiple independent markets whose distributions depend proportionately on a single unknown parameter. The authors argue that smaller markets should be given better service to acquire information.

Lavy, Victor

TI The Effect of Teen Childbearing and Single Parenthood on Childhood Disabilities and Progress in School. **AU** Angrist, Joshua D.; Lavy, Victor.

TI Using Maimonides' Rule to Estimate the Effect of Class Size on Scholastic Achievement. **AU** Angrist, Joshua D.; Lavy, Victor.

Laxton, Douglas

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

Layard, Richard

TI European Versus US Unemployment: Different Responses to Increased Demand for Skill? **AU** Jackman, Richard; Layard, Richard; Manacorda, Marco; Petrongola, Barbara.

Leahy, Dermot

PD April 1997. **TI** R&D Spillovers and the Case for Industrial Policy in an Open Economy. **AU** Leahy, Dermot; Neary, J. Peter. **AA** Leahy: University College Dublin. Neary: University College Dublin and London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 345; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 30. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** F12, L13. **KW** R&D Spillovers. Industrial Policy. Strategic Trade Policy.

AB In this paper we consider the case for subsidies towards firms which generate R&D spillovers in open economies. We show that many expected results are overturned in the presence of strategic behavior by firms. Local R&D spillovers to other domestic firms may justify an R&D tax rather than a subsidy; R&D cooperations by local firms over-internalizes the externality and also justifies an R&D tax; and international spillovers which benefit foreign firms may justify a subsidy, even though the government cares only about the profits of home firms.

Lee, David S.

PD March 1998. **TI** Wage Inequality in the U.S. during the 1980's: Rising Dispersion or Falling Minimum Wage? **AA** Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 399; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 74. **PR** \$2.00. **JE** E24, J31. **KW** Wages. Distribution. Inequality.

AB Inequality in the unconditional distribution of observed wage rates in the U.S. rose substantially during the 1980's, mostly in the lower tail of the distribution. The causes of this rising wage inequality are obscured by the fact that concurrent decreases in the federal minimum wage tend to increase observed wage inequality, regardless of its effect on employment. This study uses regional variation in the relative level of the federal minimum wage to separately identify the impact of the minimum wage from nation-wide growth in "latent" wage dispersion during the 1980's. CPS wage data show a tight empirical relation between the relative level of the federal minimum wage and dispersion in the lower tail of the wage distribution, across states over time. After accounting for the diminishing impact of the minimum wage during the 1980's, the evidence points to little or no increase in wage dispersion in the lower tail of the wage distribution.

Lee, Jason

TI Determinants of Alternative Corporate Payout Mechanisms: Cash- Dividend Increases and Open-Market-Repurchase Initiations. **AU** Bartov, Eli; Krinsky, Itzhak; Lee, Jason.

Lemieux, Thomas

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

Lettau, Martin

PD June 1997. **TI** Comment on "The Spirit of Capitalism and Stock-Market Prices" by G. S. Bakshi and Z. Chen (AER, 1996). **AA** CentER for Economic Research, Tilburg University and Center for Economic Policy Research. **SR** Tilburg Center for Economic Research Discussion Paper: 9749; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 8. **PR** no charge. **JE** G10. **KW** Macroeconomics. Capital Market.

AB Not available.

PD June 1997. **TI** Preferences, Consumption Smoothing, and Risk Premia. **AU** Lettau, Martin; Uhlig, Harald. **AA** CentER for Economic Research, Tilburg University and Center for Economic Policy Research. **SR** Tilburg Center for Economic Research Discussion Paper: 9760; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 35. **PR** no charge. **JE** E21, E44, G12. **KW** Asset Prices. Consumption. Risk Premia. Risk Diversion. Preferences.

AB Risk premia in the consumption capital asset pricing model depend on preferences and dividends. We develop a decomposition which allows a separate treatment of both components. We show that preferences alone determine the risk-return tradeoff measured by the Sharpe-ratio. In general, the risk-return trade-off implied by preferences depends on the elasticity of a preference-based stochastic discount factor for pricing assets with respect to the consumption innovation. Depending on the particular specification of preferences, the absolute value of this elasticity can coincide to the inverse of the elasticity of intertemporal substitution (e.g. for habit formation preferences) or the coefficient of relative risk-aversion (e.g. for Epstein-Zin preferences). We demonstrate that preferences based on a small elasticity of intertemporal substitution, such as habit formation, produce small risk premia once agents are allowed to save. Departing from the complete markets framework, we show that uninsurable risk can only increase the Sharpe-ratio and risk premia if dividends are correlated with individual consumption.

Levin, Andrew T.

PD August 1997. **TI** A Guide to FRB/Global. **AU** Levin, Andrew T.; Rogers, John H.; Tryon, Ralph W. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 588; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us. **PG** 57. **PR** no charge.

JE C51. **KW** Macroeconometric Models. Long-Run Stability. Rational Expectations. Fiscal Policy. Monetary Policy. European Monetary Union.

AB This paper describes the structure and illustrates the key features of FRB/Global, a large-scale macroeconomic model used in analyzing exogenous shocks and alternative policy responses in foreign economies and in examining the impact of these external shocks on the U.S. economy. FRB/Global imposes fiscal and national solvency constraints and utilizes error-correction mechanism in the behavioral equations to ensure the long-run stability of the model. In FRB/Global, expectations play an important role in determining financial market variables and domestic expenditures. Simulations can be performed using either limited-information (adaptive) or model-consistent (rational) expectations.

Levinsohn, James

PD October 1996. **TI** Firm Heterogeneity, Jobs and International Trade: Evidence from Chile. **AA** University of Michigan and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5808; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** \$5.00. **JE** E24, E32, F14. **KW** Chile. International Trade. Employment. Business Cycles.

AB This paper is about jobs and international trade. It is about what researchers can learn of the relationship between the two using firm-level data. It is about the particular experience of Chile following a broad trade liberalization and spanning significant macroeconomic contraction and expansion. Finally, this paper is about discerning patterns in the data that might later influence how international economists model the interaction between international trade and employment.

Levy, Helen

TI Accounting for the Slowdown in Employer Health Care Costs. **AU** Krueger, Alan B.; Levy, Helen.

Ligon, Ethan

PD August 1995. **TI** Altruism and Markets. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 758; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 20. **PR** \$5.00 Domestic; \$10.00 International Surface Rate; not available after publication. **JE** D31. **KW** Altruism. Competitive Equilibrium. Competitive Markets.

AB The theme of this paper is that altruism does not improve the efficiency of allocation. Altruism does generally affect the distribution of resources, and from a normative standpoint, one may view such redistribution favorably. Moving slightly beyond the Pareto criterion, if (other things being equal) one prefers greater consumption equality to less, one might wish that people were more altruistic, but such wishful thinking cannot be justified purely on grounds of efficiency. Much of the motivation for researchers interested in altruism stems from Barro (1974); it is not difficult to show using the arguments given in this paper that if children are born with some endowment, then it is possible to rationalize the sort of

Ricardian equivalence observed in that paper without resorting to altruism as an explanation. The bottom line of this paper is that if markets are complete and endowments are unobserved, then altruism of the sort modeled here will not help to explain observed allocations. A corollary of this point is that, in the absence of knowledge regarding initial endowments, observed allocations cannot be used to infer the existence of altruism.

PD March 1997. **TI** Government Management of Village Commons: Evaluating Joint Forest Management. **AU** Ligon, Ethan; Narain, Urvashi. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 821; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 51. **PR** \$12.75 Domestic; \$25.50 International Surface Rate; not available after publication. **PR** Not Given. **JE** Q230. **KW** Government Management. Forest Management. Villages. **AB** not available.

PD September 1997. **TI** Risk-Sharing and Information in Village Economies. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 824; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 35. **PR** \$8.75 Domestic; \$17.50 International Surface Rate; not available after publication. **JE** D80, O13. **KW** Risk-Sharing. Information. Village Economies. Household Models.

AB Arrangements for achieving efficient risk-sharing vary depending on the information available to agents in the economy. The usual Euler equation restricts efficient allocations in an economy which obeys the permanent income hypothesis, while efficient allocations in an economy with private information and long-term contracts satisfy a symmetric restriction, but not the Euler equation. Full insurance arrangements are unique in that they satisfy both restrictions. We look at an environment in which it seems likely that long-term contracts play a role in mitigating the effects of private information: three village economies in South India. The evidence that consumption allocations satisfy the private information restriction is quite strong in two of the three villages; the evidence for the third village suggests that while consumptions for some households satisfies the private information restrictions, other households' consumptions obey the permanent income hypothesis. An analysis of financial transactions shows that private information households in this village rely more on transfers of food and clothing than do permanent income households.

PD September 1997. **TI** Informal Insurance Arrangements in Village Economies. **AU** Ligon, Ethan; Thomas, Jonathan P.; Worrall, Tim. **AA** Ligon: University of California, Berkeley. Thomas: University of Warwick. Worrall: Keele University. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 825; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 46. **PR** \$11.50 Domestic; \$23.00 International Surface Rate; not available

after publication. **JE** O13. **KW** Insurance. Village Economies. Risk.

AB This paper studies efficient insurance arrangements in village economies when there is complete information but limited commitment. Commitment is limited because only limited penalties can be imposed on households which renege if the benefits from doing so outweigh the costs. We study a general model which admits aggregate and idiosyncratic risk as well as serial correlation of incomes. It is shown that in the case of two households and no storage the efficient insurance arrangement is characterized by a simple updating rule. An example illustrates the similarity of the efficient arrangement to a simple debt contract with occasional debt forgiveness. The model is then extended to multiple households and a simple storage technology. We use data from the ICRISAT survey of three villages in southern India to test the theory against three alternative models: autarky, full insurance, and a static model of limited commitment due to Coate and Ravallion (1993). Overall, the model we develop does a significantly better job of explaining the data than does any of these alternatives.

PD September 1997. **TI** Panel Data and Euler Equations. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 826; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 13. **PR** \$5.00 Domestic; \$10.00 International Surface Rate; not available after publication. **JE** C22, C23. **KW** Panel Data. Euler Equation. Mathematical Models.

AB Dynamic rational expectations models featuring agents with additively time-separable utility functions typically yield some sort of martingale restriction which may be used for either testing the model or estimating its parameters. While different models may yield a variety of these sorts of restrictions, the one most commonly observed is the Euler equation. Martingale restrictions are exceptionally useful in a time series context, since the martingale property delivers a very useful sort of independence. However, as noted by Chamberlain (1984), this independence property does not extend to this analysis of panel data. This paper develops a characterization of estimators that rely on N going to infinity, but which hold T fixed. In particular, we show that limiting estimator is a random variable, and show how to calculate its distribution when there are overidentifying restrictions. When the distribution of the limiting estimator is nondegenerate, the estimator cannot be consistent, but knowledge of this distribution permits us to engage in the usual sort of inference and hypothesis testing.

PD September 1997. **TI** Computing the Equilibria of Dynamic Common Property Games. **AU** Ligon, Ethan; Narain, Urvashi. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 827; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 25. **PR** \$6.25 Domestic; \$12.50 International Surface Rate; not available after publication. **JE** C70. **KW** Game Theory. Common Property.

AB In this paper, we discuss techniques for rapidly computing the equilibria of a class of dynamic linear-quadratic

games involving the extraction of a common property resource. Though this class of games has been much studied, the search for equilibria of these games has only been attempted in special cases, and analysis of the game has tended to focus on its steady-state properties. We construct a pseudo-planning problem, the optima of which correspond to the Markov perfect equilibria of the class of games we explore. We show how the optima (equilibria) of this pseudo-planning problem (game) can be rapidly computed via a Riccati-like equation. Finally, we illustrate the use of these techniques with several examples involving the extraction of a common property resource.

TI Economic Distance, Spillovers, and Cross-Country Comparisons. **AU** Conley, Tim; Ligon, Ethan.

TI Producer Price Risk and Quality Measurement. **AU** Huetth, Brent; Ligon, Ethan.

Lin, Winston

TI Would Financial Incentives for Leaving Welfare Lead Some People to Stay on Welfare Longer? An Experimental Evaluation of Entry Effects in the Self-Sufficiency Project. **AU** Card, David; Robins, Philip K.; Lin, Winston.

Lindahl, Frederick W.

TI Stock Price Behavior Around Announcements of Write-Offs. **AU** Bartov, Eli; Lindahl, Frederick W.; Ricks, William E.

Linton, Oliver

PD September 1997. **TI** The Existence and Asymptotic Properties of a Backfitting Projection Algorithm Under Weak Conditions. **AU** Linton, Oliver; Mammen, E.; Nielsen J. **AA** Linton: Yale University. Mammen: Ruprecht-Karls-Universität. Nielsen: Sundkrogsgade. **SR** Yale Cowles Foundation Discussion Paper: 1160; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 47. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** C13, C14, C22. **KW** Chaos. Kernel. Nonlinear Dynamics. Nonparametric Regression. Semiparametric Methods.

AB The authors derive the asymptotic distribution of a new backfitting procedure for estimating the closest additive approximation to a nonparametric regression function. The procedure employs a recent projection interpretation of popular kernel estimators provided by Mammen et al. (1997), and the asymptotic theory of the authors' estimators is derived using the theory of additive projections reviewed in Bickel et al. (1995). The authors' procedure achieves the same bias and variance as the oracle estimator based on knowing the other components, and in this sense improves the method analyzed in Opsomer and Ruppert (1997) The authors provide high level conditions independent of the sampling scheme. They then verify that these conditions are satisfied in a time series autoregression under weak conditions.

TI The Asymptotic Distribution of Nonparametric Estimates of the Lyapunov Exponent for Stochastic Time Series. **AU** Whang, Yoon-Jae; Linton, Oliver.

Liu, Jin Long

TI Measuring the Private Benefits from Connections to Public Water Systems in Developing Countries: A Case Study of the Punjab, Pakistan. **AU** Altaf, Mir Anjum; Jamal,

Haron; Liu, Jin Long; Smith, V. Kerry; Whittington, Dale.

Logue, Kyle D.

TI The Influence of Income Tax Rules on Insurance Reserves. **AU** Bradford, David F.; Logue, Kyle D.

Lopez-de-Silanes, Florencio

TI Trust in Large Organizations. **AU** La Porta, Rafael; Lopez-de-Silanes, Florencio; Shleifer, Andrei; Vishny, Robert W.

TI Legal Determinants of External Finance. **AU** La Porta, Rafael; Lopez-de-Silanes, Florencio; Shleifer, Andrei; Vishny, Robert W.

Lopez-Salido, J. David

TI Are Ex-post Real Interest Rates a Good Proxy for Ex-Ante Real Rates: An International Comparison Within a CCAPM Framework. **AU** Ayuso, Juan; Lopez-Salido, J. David.

TI Spanish Unemployment and Inflation Persistence: Are There Phillips Trade-Offs? **AU** Dolado, Juan J.; Lopez-Salido, J. David; Vega, Juan Luis.

TI When May Peseta Depreciations Fuel Inflation? **AU** Alberola, Enrique; Ayuso, Juan; Lopez-Salido, J. David.

Loungani, Prakash

PD March 1997. **TI** Capital Mobility and the Output-Inflation Tradeoff. **AU** Loungani, Prakash; Razin, Assaf; Yuen, Chi-Wa. **AA** Loungani: Federal Reserve Board. Razin: Tel Aviv University and International Monetary Fund. Yuen: University of Hong Kong. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 577; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us. **PG** 22. **PR** no charge. **JE** E22, E31. **KW** Output-Inflation Tradeoff. Capital Mobility. Capital Controls. Openness.

AB Our paper analyzes the effects of restrictions on capital mobility on the output-inflation tradeoff. Using a stochastic version of the Mundell-Fleming model, we establish a theoretical presumption that an increase in restrictions on capital mobility should make the tradeoff parameter smaller, that is, a given change in the inflation rate should be associated with smaller movements in output. To measure the extent to which countries restrict capital movements, we construct an index using data from the IMF's Annual Report on Exchange Rate Arrangements and Exchange Restrictions. The estimates of the output-inflation tradeoff parameter are obtained from studies by Lucas (1973), Ball, Mankiw and Romer (1988) and others. Consistent with the theoretical presumption, countries with greater restrictions on capital controls have a smaller tradeoff parameter, that is, a steeper Phillips curve. This result holds after controlling for the impact of variability of aggregate demand (as suggested by Lucas 1973) and mean inflation (as suggested by Ball, Mankiw and Romer 1988) on the tradeoff parameter.

TI Oil Shocks, Military Spending, and Other Driving Forces. **AU** Davis, Steven J.; Loungani, Prakash; Mahidhara, Ramamohan.

Louviere, J. J.

TI Family Members' Projection of Each Other's Preference and Influence: A Two-Stage Conjoint Approach. **AU** Dellaert, B. G. C.; Prodigalidad, M.; Louviere, J. J.

Low, Linda

PD December 1996. **TI** Accounting for Outward Direct Investment from Hong Kong and Singapore: Who Controls What? **AU** Low, Linda; Ramstetter, Eric D.; Yeung, Henry Wai-Chung. **AA** Low and Yeung: National University of Singapore. Ramstetter: Kansai University. **SR** National Bureau of Economic Research Working Paper: 5858; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 54. **PR** \$5.00. **JE** F21, F23. **KW** Investment. Hong Kong. Singapore. Multinational Firms.

AB This paper surveys information on outward investors from Hong Kong and Singapore with the aim of illuminating the implications of accounting for such foreign direct investment by geographical source or by country of ultimate beneficial owner. By any measure it is clear that a very large portion of the FDI from these economies comes from foreign-controlled firms and hence that ownership-based estimates of FDI from these two economies would be much smaller than the standard, geography-based estimates. However, because outward investment by foreign firms in Hong Kong and Singapore often involves substantial contributions from local staff and partners, an attempt is made to examine the extent of control over investment decisions exercised by these local staff and partners. Case studies from Hong Kong indicate a tendency for local control over investment decisions to be relatively strong in four types of foreign-controlled Hong Kong firms.

Lowrey, Barbara R.

TI The Cost of Implementing Consumer Financial Regulations: An Analysis of Experience with the Truth in Savings Act. **AU** Ellichhausen, Gregory; Lowrey, Barbara R.

Lynch, Anthony

TI Why Do Firms Merge and Then Divest: A Theory of Financial Synergy. **AU** Fluck, Zsuzsanna; Lynch, Anthony.

Maggi, Giovanni

PD July 1997. **TI** Strategic Trade Policy Under Incomplete Information. **AA** Princeton University. **SR** Princeton Financial Research Center Memorandum: 189; Financial Research Center, Department of Economics, Princeton University, Princeton, New Jersey 08544-1021. **PG** 33. **PR** \$3.00 for U.S. mailings; \$6.00 for foreign mailings. **JE** C72, D82, F13. **KW** Strategic Trade Policy. Export Subsidies. Asymmetric Information.

AB This paper examines equilibrium trade policies when firms have better information than governments about the profitability in the industry. Contrary to the intuition that the policy makers' lack of information should reduce their incentives to engage in strategic trade intervention, the analysis suggests that information asymmetries may increase trade policy distortions in equilibrium, and ultimately worsen the Prisoner's Dilemma between governments.

TI Free Trade vs. Strategic Trade: A Peck into Pandora's Box. **AU** Grossman, Gene M.; Maggi, Giovanni.

Magnus, Jan R.

TI On the Sensitivity of the Usual T-and F-Tests to AR(1) Misspecification. **AU** Banerjee, Anurag N.; Magnus, Jan R.

Mahidhara, Ramamohan

TI Oil Shocks, Military Spending, and Other Driving Forces. **AU** Davis, Steven J.; Loungani, Prakash; Mahidhara, Ramamohan.

Mairesse, Jacques

TI Computers and Productivity in France: Some Evidence. **AU** Greenan, Nathalie; Mairesse, Jacques.

TI Financial Factors and Investment in Belgium, France, Germany and the UK: A Comparison Using Company Panel Data. **AU** Bond, Stephen; Mairesse, Jacques; Elston, Julie; Mulkey, Benoit.

Maloney, William F.

TI Financial and Capital Account Liberalization in the Pacific Basin: Korea and Taiwan During the 1980s. **AU** Chinn, Menzie D.; Maloney, William F.

Mammen, E.

TI The Existence and Asymptotic Properties of a Backfitting Projection Algorithm Under Weak Conditions. **AU** Linton, Oliver; Mammen, E.; Nielsen J.

Manacorda, Marco

TI European Versus US Unemployment: Different Responses to Increased Demand for Skill? **AU** Jackman, Richard; Layard, Richard; Manacorda, Marco; Petrongola, Barbara.

Mandelbrot, Benoit

PD September 1997. **TI** A Multifractal Model of Asset Returns. **AU** Mandelbrot, Benoit; Fisher, Adlai; Calvet, Laurent. **AA** Calvet and Fisher: Yale University. Mandelbrot: Yale University and Watson Research Center. **SR** Yale Cowles Foundation Discussion Paper: 1164; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 34. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** G12, G13. **KW** Time Deformation. Trading Time. Scaling Laws. Self-Similarity. Self-Affinity.

AB This paper presents the multifractal model of asset returns (MMAR), based upon the pioneering research into multifractal measures by Mandelbrot (1972,1974). The multifractal model incorporates two elements of Mandelbrot's past research that are now well known in finance. First, the MMAR contains long-tails, as in Mandelbrot (1963), which focused on Levy-stable distributions. In contrast to Mandelbrot (1963), this model does not necessarily imply infinite variance. Second, the model contains long-dependence, the characteristic feature of fractional Brownian Motion, introduced by Mandelbrot and van Ness (1968). In contrast to FBM, the multifractal model displays long dependence in the absolute value of price increments, while price increments themselves can be uncorrelated. The MMAR is an alternative to ARCH-type representations that have been the focus of empirical research on the distribution of prices for the past fifteen years. The distinguishing feature of the multifractal model is multiscaling of the return distribution's moments under time-

rescalings.

TI Large Deviations and the Distribution of Price Changes. **AU** Calvet, Laurent; Fisher, Adlai; Mandelbrot, Benoit.

TI Multifractality of Deutschemark/US Dollar Exchange Rates. **AU** Fisher, Adlai; Calvet, Laurent; Mandelbrot, Benoit.

Mansfield, Carol

TI Does Nature Limit Environmental Federalism? **AU** Smith, V. Kerry; Schwabe, Kurt A.; Mansfield, Carol.

Manuel Marques, Jose

TI Unemployment Persistence, Central Bank Independence and Inflation Performance in the OECD Countries. **AU** Alberola, Enrique; Manuel Marques, Jose; Sanchis, Alicia.

Maravall, Agustin

PD 1997. **TI** Two Discussions on New Seasonal Adjustment Methods. **AA** Banco de Espana. **SR** Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9704; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcalá, 50, 28014 Madrid. Website: www.bde.es. **PG** 38. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** C22, C51, C87. **KW** Seasonal Adjustment. X11.

AB This document contains two discussions having to do with two new seasonal adjustment methods that are competing at present for possible replacement of the method X11/X11ARIMA in European data producing agencies (mostly national statistical offices and central banks). The first discussion offers a critical review of X12ARIMA, the new U.S. Bureau of the Census method, still heavily based on the X11 approach. The second discussion is a reply to a critique made to SEATS, the alternative method, which represents a fairly drastic methodological change. The discussion clarifies some methodological points and deals with issues related to practical application of the program.

TI Missing Observations in Arima Models: Skipping Strategy versus Additive Outlier Approach. **AU** Gomez, Victor; Maravall, Agustin; Pena, Daniel.

Marion, Nancy P.

TI Volatility and the Investment Response. **AU** Aizenman, Joshua; Marion, Nancy P.

Marshall, David A.

TI The Implications of First-Order Risk Aversion for Asset Market Risk Premiums. **AU** Bekaert, Geert; Hodrick, Robert J.; Marshall, David A.

Martinez-Pages, Jorge

TI La Utilizacion de los Indices de Condiciones Monetarias Desde la Perspectiva de un Banco Central. **AU** Caballero, Juan Carlos; Martinez-Pages, Jorge; Sastre, M. Teresa.

TI El Poder Predictivo de los Tipos de Interes Sobre la Tasa de Inflacion Espanola. **AU** Alonso-Sanchez, Francisco; Ayuso-Huertas, Juan; Martinez-Pages, Jorge.

McCallum, Bennet T.

PD November 1996. **TI** Neoclassical vs. Endogenous Growth Analysis: An Overview. **AA** Carnegie Mellon University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5844; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 46. **PR** \$5.00. **JE** O30, O40. **KW** Economic Fluctuations. Growth Models.

AB This paper begins with an exposition of neoclassical growth theory, including several analytical results such as the distinction between golden-rule and optimal steady states. Next it emphasizes that the neoclassical approach fails to provide any explanation of steady-state growth in per capita values of output and consumption, and also cannot plausibly explain actual growth differences to transitional episodes. Three types of endogenous growth models, which attempt to provide explanations of ongoing per-capita growth, are presented and discussed. The likelihood of strictly justifying steady-state growth with these models is very small, since it would require highly special parameter values, but the models' predictions may be reasonably accurate nevertheless.

PD January 1997. **TI** An Optimizing IS-LM Specification for Monetary Policy and Business Cycle Analysis. **AU** McCallum, Bennet T.; Nelson, Edward. **AA** Carnegie Mellon University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5875; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 53. **PR** \$5.00. **JE** D84, E10, E21, E32, E52. **KW** Business Cycles. Growth. Monetary Economics. Inflation. Saving.

AB This paper asks whether relations of the IS-LM type can sensibly be used for the aggregate demand portion of a dynamic optimizing general equilibrium model intended for analysis of issues regarding monetary policy and cyclical fluctuations. The main result is that only one change -- the addition of a term regarding expected future income -- is needed to make the IS function match a fully optimizing model, whereas no changes are needed for the LM function. This modification imparts a dynamic, forward-looking aspect to saving behavior and leads to a model of aggregate demand that is tractable and usable with a wide variety of aggregate supply specifications. Theoretical applications concerning price level determinacy and inflation persistence are included.

McCarthy, Nancy

PD June 1997. **TI** Land Allocation Under Dual Individual-Collective Use in Mexico. **AU** McCarthy, Nancy; de Janvry, Alain; Sadoulet, Elisabeth. **AA** McCarthy: International Livestock Research Institute and International Food Policy Research Institute. de Janvry and Sadoulet: University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 845; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 28. **PR** \$7.00 Domestic; \$14.00 International Surface Rate; not available after publication. **JE** Q15. **KW** Property Rights. Land Allocation. Overgrazing. Land Tenure. Mexico.

AB Households typically have to decide on allocating the resources which they control between individualized activities

where there is common access. In this case, the ability to cooperate in the management of common access resources determines the relative profitability of the two resource bundles and hence affects the allocation of resources held by households to one or the other. The Mexican social sector is of this type, with land under individual jurisdiction allocated to either crops or pastures: the product of land in crops is privately appropriated while land in pastures is collectively grazed. We develop a model that shows that, when cooperation fails in the management of collectively grazed pastures, more land is allocated to extensive crops than under successful cooperation and less to pastures, while the stocking rate on pastures is increased. This results in too much land in extensive crops and too many animals per hectare of pasture, a well known observation for Mexico. This prediction is confirmed by analysis of data from a sample of Mexican social sector households.

TI Endogenous Provision and Appropriation in the Commons. **AU** de Janvry, Alain; McCarthy, Nancy; Sadoulet, Elisabeth.

PD June 1998. **TI** Common Pool Resource Appropriation Under Costly Cooperation. **AU** McCarthy, Nancy; Sadoulet, Elisabeth; de Janvry, Alain. **AA** McCarthy: International Livestock Research Institute and International Food Policy Research Institute. Sadoulet and de Janvry: University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 850; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 21. **PR** \$5.25 Domestic; \$10.50 International Surface Rate; not available after publication. **JE** D70, R14. **KW** Common Pool. Property Rights. Cooperation. Grazing.

AB In addition to the usual fixed costs, we introduce variable costs in a community's effort to cooperate in extracting from a common pool resource. These variable costs are assumed to be an increasing function of individual members' incentives to default. This allows to explain why we commonly observe different qualities of cooperation across otherwise identical communities. It also allows to explain why heterogeneity in production efficiency across members or in their constraints on capacity to extract affect the feasibility and eventually the quality of cooperation, a subject on which there has been much debate in the literature.

McGrattan, Ellen R.

TI Sticky Price Models of the Business Cycle: Can the Contract Multiplier Solve the Persistence Problem? **AU** Chari, V. V.; McGrattan, Ellen R.; Kehoe, Patrick J.

TI Monetary Shocks and Real Exchange Rates in Sticky Price Models of International Business Cycles. **AU** Chari, V. V.; Kehoe, Patrick J.; McGrattan, Ellen R.

McGuire, Thomas G.

TI Alternative Insurance Arrangements and the Treatment of Depression: What are the Facts? **AU** Berndt, Ernst R.; McGuire, Thomas G.; Frank, Richard G.

Meijdam, Lex

TI Public Investment in a Small Open Economy. **AU** Heijdra, Ben J.; Meijdam, Lex.

Melenberg, Bertrand

TI An Analysis of Housing Expenditure Using Semiparametric Models and Panel Data. **AU** Charlier, E.; Melenberg, Bertrand; van Soest, Arthur.

TI An Analysis of Housing Expenditure Using Semiparametric Cross-Section Models. **AU** Charlier, E.; Melenberg, Bertrand; van Soest, Arthur.

TI Testing the Predictive Value of Subjective Labor Supply Data. **AU** Euwals, Rob; Melenberg, Bertrand; van Soest, Arthur.

Mendoza, Enrique G.

TI Rational Herd Behavior and the Globalization of Securities Markets. **AU** Calvo, Guillermo A.; Mendoza, Enrique G.

Menezes-Filho, Naercio A.

PD June 1997. **TI** Demand and Supply: The Relationship Between Price Elasticities and Profitability in the UK. **AA** University College London and London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 350; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 41. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** L10. **KW** Industry Studies. Profitability. Consumer Behavior. Identification. Firm-Level Data.

AB This paper investigates the relationship between consumer demand and firms' mark-ups for several products in the UK, using two independent datasets. It uses data on consumer expenditures and the retail price index to estimate Almost Ideal Demand Systems on microdata and compute time-varying price elasticities of demand for disaggregated commodity groups. Then, it matches the product definitions to the Standard Industry Classification and uses the estimated elasticities to investigate the impact of consumer behavior on firm-level profitability equations. The time-varying household characteristics are ideal instruments for the demand effects in the firms' supply equation. The paper concludes that demand elasticities have a significant and tangible impact on the profitability of UK firms and that this impact can shed more light on the relationship between market structure and economic performance.

Michelacci, Claudio

PD July 1997. **TI** Long-Run Growth and Business Cycle Volatility. **AA** London School of Economics and Universita Bocconi. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 351; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 48. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** E10, E32, O31. **KW** Business Cycle. Cross-Sectional Heterogeneity.

AB Before implementation, a new idea is a private good as it is both rivalrous and excludable. Its widespread economic consequences arise only when a researcher finds the market resources that suit its economic applicability. In this context we analyze how an increase in the size of business fluctuations (business cycle volatility) affects the growth process. In a

Keynesian world in which different agents interact in the market, the business cycle affects growth through two margins: the incentive to do research and implement ideas and the amount of resources available in the economy. In this paper we show how the business cycle creates disequilibrium and imbalances in the economy. In fact, it destroys the possible good balance between the amount of resources available and the incentive to use them, raising the former and reducing the latter in recession and vice-versa during a boom. As both margins are strictly required to innovate, an economy with high levels of business cycle volatility will not be able to innovate much. This and other implications of the model seem to broadly match both recent theoretical and empirical evidence.

Mincer, Jacob

PD November 1996. **TI** Changes in Wage Inequality, 1970-1990. **AA** Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5823; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 20. **PR** \$5.00. **JE** D31, E24, J24, J31. **KW** Wages. Human Capital. Income Distribution.

AB Differences in wages between skill groups declined in the 1970's and rose in the 1980's, but aggregate wage inequality grew throughout the period. In this paper the sometimes divergent paths of inter-group and intra-group inequality are explained by the human capital approach. In it, wages are the return on accumulated human capital investments. In turn, interpersonal distributions of investments and of marginal rates of return on them are determined by individual supply and demand curves. Argument and evidence in this paper show that a widening of dispersion among individual demand curves started in the 1970's and generated a continuous expansion of (within group) residual wage inequality. The widening dispersion in demand curves reflects a growing skill bias in the demand for labor. Aggregate inequality grew throughout the period because within group inequality accounts for the larger part of total inequality.

Mishkin, Frederic S.

TI Is There a Role for Monetary Aggregates in the Conduct of Monetary Policy? **AU** Estrella, Arturo; Mishkin, Frederic S.

PD December 1996. **TI** Bank Consolidation: A Central Banker's Perspective. **AA** Federal Reserve Bank of New York and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5849; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** \$5.00. **JE** E58, G21. **KW** Economic Fluctuations. Growth. Monetary Economics. Central Banks. Mergers.

AB This paper looks at why bank consolidation has been taking place in the United States and what the structure of the banking industry might look like in the future. It then discusses the implications of bank consolidation for the economy and the challenge it poses for central bankers.

TI Inflation Targeting: A New Framework for Monetary Policy? **AU** Bernanke, Ben S.; Mishkin, Frederic S.

Mitrusi, Andrew W.

TI Distributional Effects of Adopting a National Retail Sales Tax. **AU** Feenberg, Daniel R.; Poterba, James M.; Mitrusi, Andrew W.

Miura, Ryozo

PD September 1996. **TI** The Pricing Formula for Commodity-Linked Bonds with Stochastic Convenience Yields and Default Risk. **AU** Miura, Ryozo; Yamauchi, Hiroaki. **AA** Hitotsubashi University. **SR** New York University, Salomon Center Working Papers: S/97/07; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 35. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** Not available. **KW** Not available.

AB Not available.

Moore, Michael J.

TI The Effects of Short-Term Variation in Abortion Funding on Pregnancy Outcomes. **AU** Cook, Philip J.; Moore, Michael J.; Parnell, Allan M.; Pagnini, Deanna.

Moore, Robert

TI Medicaid and Service Use Among Homeless Adults. **AU** Glicd, Sherry; Hoven, Christina; Moore, Robert; Garret, A. Bowen.

Morgan, John

TI The Vickery-Clarke-Groves Versus the Simultaneous Ascending Auction: An Experimental Approach. **AU** Brenner, David; Morgan, John.

Moselle, Boaz

PD August 1997. **TI** A Model of a Predatory State. **AU** Moselle, Boaz; Polak, Ben. **AA** Moselle: Northwestern University. Polak: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1158; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 44. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** D30, H11, H41, O10. **KW** Predatory State. Anarchy. Banditry. Public Goods. Welfare.

AB The authors provide a model of a primitive state whose rulers extort taxes for their own ends. This predatory state can result in lower levels of both output and popular welfare than either organized banditry or anarchy. The predatory state may provide public goods and hence may superficially resemble a contractual state. But, the ability to provide such goods can actually reduce popular welfare after allowing for tax changes. The authors compare the revenues raised by taxation with those from banditry to get an idea when primitive states are likely to emerge. They then consider interactions between bandits and state. Corrupt side-deals are bad for output and popular welfare, but good for revenue. The existence of a mafia and of the state can be good for each other. Competition between organized crime and the state typically reduces popular welfare and pushes the volume of banditry close to its anarchy level.

Moulin, Herve

PD March 1997. **TI** Procedural cum Endstate Justice: An Implementation Viewpoint. **AA** Duke University. **SR** Duke University Department of Economics Working

Papers: 97/17; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. PG 28. PR no charge. JE D63, D70. KW Distributive Justice. Implementation. Procedural Justice. Endstate Justice. Game Forms.

AB Means matter as well as ends. In the context of the microeconomic allocation of resources, the familiar statement corresponds to the duality of procedural versus endstate justice; the tension between these two approaches is highlighted by the strategic implementation approach. It is argued that the strong requirement of strategy proofness provides the only context where the two approaches coincide for strategy proof mechanisms, and only for those, the justice of the mechanism is equivalent to that of its endstate. The literature on strategy proof allocation mechanisms is briefly reviewed, and its recent revival is emphasized.

PD April 1997. **TI** Distributive and Additive Costsharing of an Homogeneous Good. **AU** Moulin, Herve; Shenker, Scott. **AA** Moulin: Duke University. Shenker: Xerox Corporation. **SR** Duke University Department of Economics Working Papers: 97/21; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. PG 32. PR no charge. JE C71, D63, H40. KW Surplus Sharing. Distributivity. Cooperative Production. Incremental Cost. Average Cost Pricing.

AB The authors consider the sharing of the cost of producing a homogeneous good when the technology has variable returns and individuals have arbitrary demands. They give a full analytical description of the family of cost-sharing methods that allocate costs in proportion to demands when returns are constant, and commute with the additivity and composition of cost functions. Two prominent methods in this family are average cost pricing and incremental cost-sharing. The authors show that all other methods in the family combine elements of the average cost and incremental ones. Serial cost-sharing stands out prominently in the family, whereas the Shapley-Shubik method, and all values from the associated stand alone cooperative games, are excluded.

Mroz, Thomas A.

PD October 1997. **TI** Discrete Factor Approximation in Simultaneous Equation Models: Estimating the Impact of a Dummy Endogenous Variable on a Continuous Outcome. **AA** University of North Carolina. **SR** University of North Carolina Working Paper Series: 97/02; Department of Economics, CB #3305, Gardner Hall, Room 102, University of North Carolina, Chapel Hill, NC 27599-3305. PG 52. PR no charge. JE C14, C24, C25, C34, C35. KW Simultaneous Equations. Binary Response. Latent Variables. Finite Mixture. Monte Carlo.

AB This paper contains a Monte Carlo evaluation of estimators used to control for the endogeneity of dummy explanatory variables in continuous outcome regression models. It highlights the use of discrete approximations to model the unobserved factors that give rise to endogeneity. The experiments vary sample sizes, distributions, error correlations, R²'s, and exclusions restrictions. When the true underlying model has joint normal disturbances, estimators using discrete approximations compare favorably to the efficient normal maximum likelihood estimator in terms of bias and precision. When the true disturbances are non-normal, the discrete factor estimators outperform estimators incorrectly assuming joint normality. The Monte Carlo results also indicate that one

should use liberal criteria for deciding whether to add additional points of support to the discrete factor distribution. The paper concludes with an application of the discrete factor approach to the estimation of the impact of marriage on younger men's wages.

Mulkay, Benoit

TI Financial Factors and Investment in Belgium, France, Germany and the UK: A Comparison Using Company Panel Data. **AU** Bond, Stephen; Mairesse, Jacques; Elston, Julie; Mulkay, Benoit.

Mumford, Karen

PD July 1997. **TI** The Hiring Function Reconsidered: On Closing the Circle. **AU** Mumford, Karen; Smith, Peter. **AA** Mumford: University of York and London School of Economics. Smith: University of York. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 359; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 24. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE J60. KW Job Searches. Living. Matching. Ranking.

AB This paper is concerned with the matching of job searchers with vacant jobs: a key component of the dynamics of worker reallocation in the labor market. The job searchers may be unemployed, employed or not in the labor force and we estimate matching or hiring functions including all three groups. We show that previous studies, which ignore both employer job seekers and unemployed job seekers who are considered to be out of the labor force, produce biased estimates of the coefficients of interest. By considering only unemployment outflows into jobs and ignoring interdependencies with other flows, these studies overlook an important aspect of job matching. Our estimates on Australian data support a more general approach and produce models that dominate those proposed previously. We also provide clear ranking preferences amongst job seekers in the hiring process: those already in jobs are more successful than the unemployed who are, in turn, more successful than those not in the labor force. Together these results demonstrate that the disaggregate worker flows and their interdependence are key features of the labor market and should be included in studies of the hiring process.

Murgai, Rinku

PD June 1998. **TI** Localized and Incomplete Mutual Insurance. **AU** Murgai, Rinku; Winters, Paul; Sadoulet, Elisabeth; de Janvry, Alain. **AA** Murgai, Sadoulet, and de Janvry: University of California, Berkeley. Winters: International Potato Center. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 848; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. PG 29. PR \$7.25 Domestic; \$14.50 International Surface Rate; not available after publication. JE G22, O10. KW Insurance. Risk-Sharing.

AB Less-than-full insurance at the community level can arise due to two types of transaction costs: association costs of establishing links with insurance partners, and extraction costs

of using these links to implement insurance transfers. Recognizing the existence of association costs sheds new light on existing empirical analyses. These have invariably found less-than-full risk pooling at the community level and proposed that extraction costs due to asymmetric information or incomplete enforcement lead to imperfect insurance. Our analysis proposes a more complete explanation: imperfect community-level insurance may arise because association costs restrict insurance to sub-coalitions within the community, whereby insurance at the sub-coalition level may well be full. Empirical results using household data on secondary water exchanges from Pakistan confirm the importance of association costs: reciprocity is localized to kin and to other partners with low transactions costs of executing trades. This suggests that in order to assess the performance of community-level insurance or other risk sharing schemes, we need to obtain information not only on how complete transfers are but also on who the partners to an exchange are.

TI Rural Development and Rural Policy. **AU** de Janvry, Alain; Murgai, Rinku; Sadoulet, Elisabeth.

Nadiri, M. Ishaq

PD November 1996. **TI** The Changing Structure of Cost and Demand for the US Telecommunications Industry. **AU** Nadiri, M. Ishaq; Nandi, Banani. **AA** Nadiri: New York University and National Bureau of Economic Research. Nandi: AT&T Laboratories. **SR** National Bureau of Economic Research Working Paper: 5820; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 41. **PR** \$5.00. **JE** D20, L23, L43, L96. **KW** Telecommunications. Production Structure. Bell System. Divestiture. Regulation.

AB This paper formulates a multiproduct structural model to examine the evolution of the structure of production and demand and the dynamic interaction between the two in the context of the U.S. telecommunications industry over an extended period, from 1935 to 1987. The authors estimate the degree of scale economies, cost elasticities, input price elasticities and the determinants of output demand. The contribution of the quasi-fixed inputs, such as R&D and physical capital, in the evolution of this industry are examined. The authors examine a number of important issues such as the stability of the cost and demand structure over time, the changing characteristics of demand for local and toll services and the variation of price-cost margin over time under different economic conditions, market structures and regulatory environments.

Nahuis, Richard

TI Optimal Product Variety, Scale Effects, and Growth. **AU** de Groot, Henri L. F.; Nahuis, Richard.

Nandi, Banani

TI The Changing Structure of Cost and Demand for the US Telecommunications Industry. **AU** Nadiri, M. Ishaq; Nandi, Banani.

Narain, Urvashi

TI Government Management of Village Commons: Evaluating Joint Forest Management. **AU** Ligon, Ethan; Narain, Urvashi.

TI Computing the Equilibria of Dynamic Common Property

Games. **AU** Ligon, Ethan; Narain, Urvashi.

Neary, J. Peter

TI R&D Spillovers and the Case for Industrial Policy in an Open Economy. **AU** Leahy, Dermot; Neary, J. Peter.

PD May 1997. **TI** Pitfalls in the Theory of International Trade Policy: Concertina Reforms of Tariffs and Subsidies to High-Technology Industries. **AA** University College Dublin and London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 346; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 28. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** F13. **KW** Trade Liberalization. Tariff Reform. Concertina Rule. Customs Unions. Industrial Policy. **AB** This paper explores the links between international trade theory and the practice of trade and industrial policy in open economies, with special attention to three areas where theoretical lessons have been misunderstood on policy debates. I argue that the "concertina rule" for tariff reform justifies reductions in high tariffs, but not moves towards uniformity, and particularly not increases in low tariffs. I show that the basic principles of tariff reform are the same in unilateral, multilateral and customs union contexts. Finally, I show that the theory of strategic trade policy does not justify export subsidies to high-technology industries.

Nelson, Edward

TI An Optimizing IS-LM Specification for Monetary Policy and Business Cycle Analysis. **AU** McCallum, Bennet T.; Nelson, Edward.

Neumark, David

TI Order from Chaos? The Effects of Early Labor Market Experiences on Adult Labor Market Outcomes. **AU** Gardecki, Rosella; Neumark, David.

Nielsen J.

TI The Existence and Asymptotic Properties of a Backfitting Projection Algorithm Under Weak Conditions. **AU** Linton, Oliver; Mammen, E.; Nielsen J.

Nielsen, Soren Bo

TI Privatization, Public Investment, and Capital Income Taxation. **AU** Huizinga, Harry; Nielsen, Soren Bo.

TI The Taxation of Interest in Europe: A Minimum Withholding Tax? **AU** Huizinga, Harry; Nielsen, Soren Bo.

TI A Welfare Comparison of International Tax Regimes with Cross-Ownership of Firms. **AU** Huizinga, Harry; Nielsen, Soren Bo.

Nikolakaki, Maria

PD April 1997. **TI** Is Europe an Optimum Currency Area?: A Reconsideration of the Evidence. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 342; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 59. **PR** 5 pounds for individual copies; 95 pounds for yearly

subscription. **JE** E32, E59, F31, F41. **KW** Monetary Regimes. Business Fluctuations. Open Economy. Macroeconomics. EMU. Exchange Rates.

AB The main macroeconomic cost of a European Monetary Union could result from the loss of nominal exchange rate flexibility as an instrument for real exchange rate adjustment between regions exposed to asymmetric goods-markets (IS) shocks. However, if asset-market (LM) shifts drive macroeconomic fluctuations, fixed exchange rates and for that matter the European Monetary Union would stabilize the economy better than floating exchange rates. These considerations suggest that the choice of an exchange rate regime depends on whether the shocks affecting the economy originated in the goods or money markets. There is no doubt that identifying the incidence of shocks to aggregate demand (which simply aggregates goods and money market shocks) and aggregate supply shocks is inappropriate in deciding on the exchange rate regime. But, what is the nature of shocks across the main European member states? In particular, what is the relative importance of good market (IS) shock versus asset market shocks (LM) in the European Union? This is the question analyzed in this paper.

Norde, Henk

TI The Consistency Principle for Set-Valued Solutions and a New Direction for the Theory of Equilibrium Refinements. **AU** Dufwenberg, Martin; Norde, Henk; Reijniere, Hans; Tijs, Stef.

Nordhaus, William D.

PD May 1997. **TI** Beyond the CPI: An Augmented Cost of Living Index (ACOLI). **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1152; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 15. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** E31. **KW** Consumer Price Index. Augmented Consumption. Income. Inflation.

AB This note examines the question of calculating an augmented cost of living index (ACOLI). The ACOLI is the appropriate deflator to apply to pretax market incomes when calculating economic well-being. Well-being includes, not only conventional consumer purchases, but also goods and services provided by employers, by mandated social regulations, and by tax-financed public goods. Because such augmented consumption is often provided in ways that raise prices but not market incomes, deflating with conventional price indexes may understate real income growth. An application of the ACOLI approach to the United States during the 1960-1994 period indicates that the conventional consumer price index has grown about 15 percent faster than the ACOLI. This correction would reduce the augmented cost of living by 0.40 percent per year over the last 35 years.

Novales, Alfonso

TI Joint Dynamics of Spot and Forward Exchange Rates. **AU** Castro, Francisco; Novales, Alfonso.

Odijk, Michiel A.

PD January 1997. **TI** Decision Support System Help Rained to Search for Win-Win Solutions in Railway Network Design. **AU** Odijk, Michiel A.; Zwaneveld, Peter J.; Hooghiemstra, Jurjen S.; Kroon, Leo G.; Salomon, Marc. **AA** Odijk: Delft University of Technology. Zwaneveld and

Kroon: Erasmus University. Hooghiemstra: Rained Innovation. Salomon: Rabobank and Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9706; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 21. **PR** no charge. **JE** H54. **KW** Railway Infrastructure.

AB Rained BV advises the Dutch government on the investments in future railway infrastructure (tracks, stations, fly-overs, tunnels, security systems, energy supply systems, etc). For this purpose, Rained generates and evaluates infrastructural scenarios. These scenarios stem from governmental objectives and those of exploiters of the railway network, the Dutch railway company Nederlandse Spoorwegen (NS) being by far the largest. A major problem with these scenarios is that the government and NS have different objectives, which may be conflicting sometimes. The government finances and manages the infrastructure, and her main objective is to not exceed budget limits while meeting at the same time social and environmental priorities. NS exploits the infrastructure, and wishes to have an infrastructure that guarantees long-term profitability. To generate and evaluate infrastructural scenarios, Rained uses various Decision Support Systems (DSS). These DSS's have shown to be very successful in helping to find and analyze scenarios that yield win-win solutions to the Dutch government and to NS.

Oettinger, Gerald S.

PD June 1997. **TI** Daily Labor Supply of Stadium Vendors: An Empirical Analysis of Participation and Effort Decisions. **AA** University of Texas and Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 383; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 49. **PR** \$1.50. **JE** J22, J23, J33. **KW** Labor Supply. Participation. Effort. Vendors.

AB This paper analyzes the labor supply behavior of food and beverage vendors at a single major league baseball stadium over an entire season. In contrast to the conventional labor supply model, the vendors studied are paid a pure commission rather than an hourly wage, choose whether to work and how hard to work rather than how long to work, and influence the prevailing "wage" at the stadium through their joint labor supply decision. The author develops a model that addresses these unique aspects of a vendor's labor supply decision and from it derives an empirical framework for estimating the relevant labor supply elasticities. The main result from the empirical analysis is that vendor labor supply elasticities are positive and substantial on both the participation and effort margins. The estimates also suggest that the elasticity of vendor effort with respect to the commission rate is positive and large.

Ofek, Eli

PD June 1997. **TI** Taking Stock: Does Equity-Based Compensation Increase Managers' Ownership? **AU** Ofek, Eli; Yermack, David. **AA** New York University. **SR** New York University, Salomon Center Working Papers: S/97/22; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 22. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** G32, J33. **KW** Hedging. Compensation Packages.

Stock Options. Managers.

AB The authors find that executives' stock ownership fails to increase after compensation awards of stock options and restricted stock, as managers reduce prior stock ownership to counteract boards' attempts to tie their wealth to firm value. Executives sell stock during years in which they receive new options or restricted stock. Further selling occurs over time if options move into-the-money. When options are exercised, managers sell virtually all the shares acquired. These effects are strongest for high-ownership executives who already hold many shares, while stock-based compensation does appear to increase the holdings of low-ownership executives. The authors' findings cast considerable doubt on the common theoretical assumption that managers cannot hedge the risks of stock-based compensation.

TI Exchange Rate Exposure, Hedging, and the Use of Foreign Currency Derivatives. **AU** Allayannis, George; Ofek, Eli.

TI Causes and Effects of Corporate Refocusing Programs. **AU** Berger, Philip G.; Ofek, Eli.

Offerman, Theo

PD February 1997. **TI** What's Causing Overreaction? An Experimental Investigation of Recency and the Hot Hand Effect. **AU** Offerman, Theo; Sonnemans, Joep. **AA** Offerman: Tilburg University, Sonnemans: University of Amsterdam. **SR** Tilburg CentER for Economic Research Discussion Paper: 9736; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 23. **PR** no charge. **JE** C91, H41. **KW** Overreaction. Recency. Hot Hand. Experiments.

AB A substantial body of empirical literature provides evidence for overreaction in markets. Past losers outperform past winners in stock markets as well as in sports markets. Two hypotheses are consistent with this observation. First, the recency hypothesis states that traders overweigh recent information. Thus, they are too optimistic about winners and too pessimistic about losers. Second, the hot hand hypothesis states that traders try to discover trends in the past record of a firm or a team, and thereby overestimate the autocorrelation in the series. An experimental design allows us to distinguish between these hypotheses. The evidence is consistent with the hot hand hypothesis.

Opp, Karl-Dieter

PD November 1996. **TI** Does Anti-Regime Action Under Communist Rule Affect Political Participation After the Fall? Results of a Panel Study in East Germany. **AA** University of Leipzig. **SR** University of Western Ontario Papers in Political Economy: 79; Department of Economics, Social Science Center, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.socl.uwo.ca/economics. **PG** 36. **PR** no charge. **JE** C33, D72, P40. **KW** Political Participation. Voting Behavior. Communism. East Germany.

AB This paper addresses the effects of political participation at a certain time on the actor's participation at a later time. It is argued that if there is an effect it is an indirect one: political action is related to incentives to participate, and these incentives affect participation at a later time. Based on previous

research, the paper proposes a model including the most important incentives to participate, and proposes hypotheses specifying the effects of participation on these incentives. These hypotheses are tested by panel data collected in Leipzig referring to the situation of 1989 and 1993. The most important results are that participation in anti-regime action in 1989 led to high political, social and economic satisfaction and increased perceived political influence in 1993. There were no effects of participation in 1989 on accepting norms to protest or justification of political violence and on integration into protest promoting networks in 1993.

Osiewalski, Jacek

PD October 1997. **TI** A Stochastic Frontier Analysis of Output Level and Growth in Poland and Western Economies. **AU** Osiewalski, Jacek; Koop, Gary; Steel, Mark F. J. **AA** Osiewalski: Academy of Economics, Krakow. Koop: University of Edinburgh. Steel: Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9785; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 26. **PR** no charge. **JE** C11, O47. **KW** Bayesian Inference. Efficiency. Gibbs Sampling. Productivity Analysis. Technical Change.

AB This paper uses Bayesian stochastic frontier methods to measure the productivity gap between Poland and Western countries that existed before the beginning of the main Polish economic reform. Using data for 20 Western economies, Poland and Yugoslavia (1980-1990) we estimate a translog stochastic frontier and make inference about individual efficiencies. Following the methodology proposed in our earlier work, we also decompose output growth into technical, efficiency and input changes and examine patterns of growth in the period under consideration.

Ostry, Jonathan D.

TI Does the Nominal Exchange Rate Regime Matter? **AU** Ghosh, Atish R.; Gulde, Anne-Marie; Ostry, Jonathan D.; Wolf, Holger C.

Ottaviano, Gianmarco I. P.

PD August 1997. **TI** Agglomeration in the Global Economy: A Survey of the New Economic Geography. **AU** Ottaviano, Gianmarco I. P.; Puga, Diego. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 356; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 40. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** F15. **KW** Integration. Agglomeration.

AB This review of recent contributions reveals common conclusions about the effects of integration on location. For high trade costs, the need to supply markets locally encourages firms to spread across different regions. Integration weakens the incentives for self-sufficiency and for intermediate values of trade costs pecuniary externalities induce firms and workers to cluster together, turning location into a self-reinforcing process. However, agglomeration raises the price of immobile local factors and goods, so far low transport costs firms may spread to regions where these prices are lower.

Ouliaris, Sam

TI Band Spectral Regression with Trending Data.
AU Corbae, Dean; Ouliaris, Sam; Phillips, Peter C. B.

Owen, Ann L.

TI Income Inequality and Macroeconomic Fluctuations.
AU Iyigun, Murat F.; Owen, Ann L.

Ozge, Yonca A.

TI Sample-Path Solutions for Simulation Optimization Problems and Stochastic Variational Inequalities.
AU Gurkan, Gul; Ozge, Yonca A.; Robinson, Stephen M.

TI Sample-Path Solution of Stochastic Variational Inequalities. **AU** Gurkan, Gul; Ozge, Yonca A.; Robinson, Stephen M.

TI Functional Properties of Throughput in Tandem Lines with Unreliable Servers and Finite Buffers. **AU** Gurkan, Gul; Ozge, Yonca A.

Page Jr., Frank H.

TI Optimal Budget Balancing Income Tax Mechanisms and the Provision of Public Goods. **AU** Berliant, Marcus; Page Jr., Frank H.

PD February 1997. **TI** Existence of Optimal Auctions in General Environments. **AA** University of Alabama. **SR** Tilburg CentER for Economic Research Discussion Paper: 9728; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 44. **PR** no charge. **JE** C70. **KW** Optimal Auctions. Bayesian. Incentive Compatibility. Relative K-Compactness.

AB We provide a unified approach to the problem of existence of optimal auctions for a wide variety of auction environments. We accomplish this by first establishing a general existence result for a particular Stackelberg revelation game. By systematically specializing our revelation game to cover various types of auctions, we are able to deduce the existence of optimal Bayesian auction mechanisms for single and multiple unit auctions, as well as for contract auctions with moral hazard and adverse selection. In all cases, we allow for externalities, risk aversion, and multidimensional, stochastically dependent types.

Pagnini, Deanna

TI The Effects of Short-Term Variation in Abortion Funding on Pregnancy Outcomes. **AU** Cook, Philip J.; Moore, Michael J.; Pamell, Allan M.; Pagnini, Deanna.

Paldam, Martin

PD September 1997. **TI** The Micro Efficiency of Danish Development Aid. **AA** University of Aarhus. **SR** Aarhus Department of Economics Working Paper: 1997/13; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. **PG** 28. **PR** no charge. **JE** F35, H43. **KW** Danish Development Aid. Project Evaluation.

AB Danish development aid is analyzed by visiting a sample of projects five years after their completion. The sample is stratified to nine countries chosen to be main, peaceful

recipients in the main regions. The criterion of success is if the projects do what they are meant to. If we think the project would not have been accepted by Danida given present knowledge, it gets 0 to 2 points, and vice versa from 2 to 4 points. The average project obtains 2.16 points, but as our selection process has a couple of small upward biases, it is dubious if the true average is above 2. Projects in Africa, agriculture and parastatals are negative outliers with 3/4 to 1 point, while projects in East Asia get 1 point more. There are some indications that Danida is more successful with small projects and NGO-projects. The soft, informal, multi-goal decision process used by Danida is discussed.

PD March 1998. **TI** Soft Criteria in Danish Development Aid. An Essay on Post-Materialist Values in Practice. **AA** University of Aarhus. **SR** Aarhus Department of Economics Working Paper: 1998/04; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. **PG** 20. **PR** no charge. **JE** H43, H59, O19. **KW** Danish Development Aid. Post-Materialism. Bureaucracy.

AB The largest and most altruistic development aid programs are the ones of a group of countries known as the Like-Minded Countries. The LMC's are the small rich NW-European countries and Canada. The LMC's have developed a distinct "soft" aid ideology that differs from the 'hard' ideology of other donors. We shall use the Danish program as an example. The explanation starts from a dual markets hypothesis, (a) aid policies are formed at the LMC markets, where the voters demand post-material altruism, and (b) projects are made on a market between the LMC- bureaucracy and the LDC's demanding development. In addition, the softness is a consequence of the normal behavior of a bureaucracy demanding power and slack.

TI Markets and Municipalities. A Study of the Behavior of the Danish Municipalities. **AU** Christoffersen, H.; Paldam, Martin.

Palomino, Frederic

PD October 1997. **TI** Relative Performance Equilibrium in Financial Markets. **AA** CentER for Economic Research, Tilburg University and Center for Economic Policy Research. **SR** Tilburg CentER for Economic Research Discussion Paper: 9799; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 25. **PR** no charge. **JE** D43, G14, G23. **KW** Performance Evaluation. Walrasian Strategy. Relative Performance.

AB Money management is an activity in which agents are often evaluated on the basis of their relative performance. In this article, we consider an oligopolistic market in which some informed traders aim at maximizing their relative performance rather than their absolute performance. First, we define a relative performance equilibrium (RPE) and derive conditions for existence and uniqueness of such an equilibrium. Second, we analyze equilibrium trading strategies. We show that the relative performance evaluation strengthens competition among agents. In particular, if all informed agents observe the same signal, the RPE strategy is the Walrasian strategy, i.e., the strategy played when (i) traders maximize their absolute performance and (ii) act as price-takers. One of the

consequences is that the level of informational efficiency is higher than when agents maximize their absolute performance.

Parnell, Allan M.

TI The Effects of Short-Term Variation in Abortion Funding on Pregnancy Outcomes. **AU** Cook, Philip J.; Moore, Michael J.; Parnell, Allan M.; Pagnini, Deanna.

Payne, Abigail A.

TI School Finance Reform, the Distribution of School Spending, and the Distribution of SAT Scores. **AU** Card, David; Payne, Abigail A.

Peeters, Marga

PD April 1997. **TI** Does Demand and Price Uncertainty Affect Belgian and Spanish Corporate Investment? **AA** De Nederlandsche Bank. **SR** Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9707; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid. Website: www.bde.es. **PG** 16. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** D81, G31. **KW** Corporate Investment. Uncertainty.

AB Several recent studies have shown that uncertainty affects investments decisions. Specifically, demand and/or price uncertainty are found to depress corporate investment in the United States. This paper investigates whether similar results hold for Belgium and Spain, countries where financial markets are less developed and many firms evidently face financial constraints. Uncertainty of demand, output prices and investment prices are measured by the standard deviation of (pre-)filtered Belgian (1984-1992) and Spanish (1983-1993) panel data, and included as explanatory variables in the investment equations derived from a neo-classical model. The results indicate that investment behavior towards uncertainty differs significantly between low and high-leverage firms in both Belgium and Spain.

Peleg, Bezalel

TI When Will the Fittest Survive? An Indirect Evolutionary Analysis. **AU** Guth, Werner; Peleg, Bezalel.

Pena, Daniel

TI Missing Observations in Arima Models: Skipping Strategy versus Additive Outlier Approach. **AU** Gomez, Victor; Maravall, Agustin; Pena, Daniel.

Peretto, Pietro F.

PD March 1997. **TI** Technological Change, Market Rivalry, and the Evolution of the Capitalist Engine of Growth. **AA** Duke University. **SR** Duke University Department of Economics Working Papers: 97/06; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 37. **PR** no charge. **JE** E10, L16, O31, O40. **KW** Industrialization. Research and Development. Technological Change. Long-Run Growth. Market Structure.

AB The history of western industrialization suggests that a fundamental change in the structure of incentives, and consequently in the nature and the organization of the R&D process, occurred around the turn of the century. To address this change the author constructs a model where the change is endogenous to the evolution of the economy towards industrial maturity. The change in the locus of innovation -- from R&D

undertaken by inventors-entrepreneurs, to R&D undertaken within established firms in close proximity to the production line -- results from the interaction of market structure and firm-based technological change. This interaction, this paper argues, captures the essence of the evolution of the capitalist engine of growth and provides an economic explanation of a "stylized fact" that has received no attention in the theoretical literature. The endogenous market structure generates dynamic feedbacks that shape the growth path of the economy and determine the structural change.

PD April 1997. **TI** Technological Interdependence, Industrial Development and Balanced Growth. **AA** Duke University. **SR** Duke University Department of Economics Working Papers: 97/10; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 38. **PR** no charge. **JE** E10, L16, O31, O40. **KW** Growth. Development. Technological Change. Interdependence. Multiple Equilibria.

AB Economic history suggests that what makes it so difficult to trace the changes in technology that drive the development of an economy to a few, clearly identifiable sources is the interdependence between three factors: technological complementarities, the cumulative impact of small improvements, and interindustry relationships. In this paper, the author incorporates these factors in a tractable model of endogenous technological change. The objective is to disentangle the contribution to productivity growth of each factor in order to study their dynamic interaction. The model provides a new perspective on the interdependence between capital accumulation, firm-based technological change, competition in imperfect markets, and industrial development and growth. In particular, it specifies a cumulative process that explains why and how some economies get trapped in a state of underdevelopment while others, structurally similar, take off and enter a virtuous circle that in the long run converges to a balanced-growth.

PD April 1997. **TI** The Dynamic Effects of Taxes and Subsidies on Market Structure and Economic Growth. **AA** Duke University. **SR** Duke University Department of Economics Working Papers: 97/12; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 40. **PR** no charge. **JE** E10, H20, L16, O31, O40. **KW** Market Structure. Technological Change. Research and Development. Taxes. Environment.

AB In this paper, the author studies the effects of taxes and subsidies on the growth path of the economy in a model where market structure is endogenous and jointly determined with the rate of technological change. An important reason for considering market structure is that a Pigouvian production tax on polluting firms is not sufficient to achieve social efficiency when the number of firms is endogenous. The author investigates the implications of this argument for an economy that exhibits endogenous growth. The analysis is positive. Two sets of results emerge. First, one cannot unambiguously conclude that a production tax -- an instrument very similar to the carbon tax -- reduces environmental damages. If one focuses on steady state effects only, the tax leads to lower aggregate production, lower production per firm, more firms, and unchanged growth. Second, the transitional dynamics of the model imply that the procedure of introduction of the tax matters.

Perez, Miguel

TI Un Indicador de Gasto en Construcción para la Economía Española. **AU** Buisan, Ana; Perez, Miguel.

Peters, Hans

TI When to Fire Bad Managers: The Role of Collusion Between Management and Board of Directors. **AU** Rebers, Eugene; Beetsma, Roel M. W. J.; Peters, Hans.

Petrongola, Barbara

TI European Versus US Unemployment: Different Responses to Increased Demand for Skill? **AU** Jackman, Richard; Layard, Richard; Manacorda, Marco; Petrongola, Barbara.

Petrongola, Barbara

TI Random or Non-Random Matching? Implications for the Use of the UV Curve as a Measure of Matching Effectiveness. **AU** Gregg, Paul; Petrongola, Barbara.

Phillips, Peter C. B.

TI Model Selection in Partially Nonstationary Autoregressive Processes with Reduced Rank Structure. **AU** Chao, John C.; Phillips, Peter C. B.

TI An ADF Coefficient Test for a Unit Root in ARMA Models of Unknown Order with Empirical Applications to the US Economy. **AU** Xiao, Zhijie; Phillips, Peter C. B.

TI Regressions for Partially Identified, Cointegrated Simultaneous Equations. **AU** Choi, In; Phillips, Peter C. B.

TI Band Spectral Regression with Trending Data. **AU** Corbae, Dean; Ouliaris, Sam; Phillips, Peter C. B.

Piske, Jorn-Steffen

PD November 1996. **TI** Continuous Training in Germany. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5829; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** \$5.00. **JE** J24, J31, J44, J45. **KW** Employment. Training. Human Capital. Germany. Wages.

AB Using data from the German Socio Economic Panel, the author describes the incidence, attributes, and outcomes of continuous training received by workers in Germany between 1986 and 1989. Further training is primarily a white collar phenomenon and is concentrated among the more highly educated, and in the service sector and in public administration. Much of this training seems to be general and provided to workers by their employers at no direct cost. On the other hand, training also does not seem to result in large short-run wage gains, especially for men. These results are somewhat at odds with the conventional models about the financing of human capital formation.

Plasmans, J. E. J.

TI The (In)Finite Horizon Open-Loop Nash LQ Game: An Application to EMU. **AU** Engwerda, Jacob C.; van Aarle, B.; Plasmans, J. E. J.

Polak, Ben

TI A Model of a Predatory State. **AU** Moselle, Boaz;

Polak, Ben.

Porteus, Evan L.

TI Does Technology Leadership Require the Ability to Produce at Lower Cost? **AU** Schmidt, Glen M.; Porteus, Evan L.

TI Stalking Information: Bayesian Inventory Management With Unobserved Lost Sales. **AU** Lariviere, Martin A.; Porteus, Evan L.

Possajennikov, Alexandre

PD January 1997. **TI** An Analysis of a Simple Reinforcing Dynamics: Learning to Play an Egalitarian Equilibrium. **AA** CentER for Economic Policy Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9719; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 27. **PR** no charge. **JE** C72, D81. **KW** Equilibrium Selection. Stochastic Learning. Bounded Rationality.

AB The paper analyzes a simple reinforcing dynamics. The dynamics can be interpreted as a learning dynamics with fixed aspiration level. All payoffs are assumed to be above this aspiration level, therefore all strategies are reinforcing. Different versions of the dynamics exhibit different convergence properties. The analysis starts with one-agent decision problems and proceeds to games. Some results are available for decision problems and simple games. For complex games computer simulations are performed. The hypothesis is that the dynamics favors an egalitarian equilibrium even if it does not satisfy other refinements.

Poterba, James M.

TI Distributional Effects of Adopting a National Retail Sales Tax. **AU** Feenberg, Daniel R.; Poterba, James M.; Mitrusi, Andrew W.

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.

Potters, Jan

PD March 1997. **TI** Campaign Expenditures, Contributions and Direct Endorsements: The Strategic Use of Information and Money to Influence Voter Behavior. **AU** Potters, Jan; Sloof, Randolph; van Winden, Frans. **AA** Potters: CentER for Economic Research and Tilburg University. Sloof and van Winden: Tinberg Institute and University of Amsterdam. **SR** Tilburg CentER for Economic Research Discussion Paper: 9727.; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 40. **PR** no charge. **JE** D72. **KW** Campaign Expenditures. Endorsements. Interest Groups.

AB A costly signaling model is presented in which we show how campaign expenditures can buy votes. The model shows that the amount of campaign expenditures may convey the electorate information about the candidate's intended policy. When this model is extended to allow for a contributing interest group, it appears that for campaigning to be informative it is sometimes crucial that campaign funds are supplied by

informed third parties. The extension also provides an explanation why interest groups contribute to the candidate's campaign, rather than using direct endorsements; they may need the candidate as an intermediary to filter their opposing interests.

Prodigalidad, M.

TI Family Members' Projection of Each Other's Preference and Influence: A Two-Stage Conjoint Approach. **AU** Dellaert, B. G. C.; Prodigalidad, M.; Louviere, J. J.

Puga, Diego

TI Agglomeration in the Global Economy: A Survey of the New Economic Geography. **AU** Ottaviano, Gianmarco I. P.; Puga, Diego.

Quiros-Romero, Gabriel

PD February 1997. **TI** Una Valoración Comparativa del Mercado Español de Deuda Pública. **AA** Banco de España. **SR** Banco de España. Servicio de Estudios. Documento de Trabajo: 9703; Banco de España. Sección de Publicaciones. Negociado de Distribución y Gestión. Alcalá 50. 28014 Madrid. Website:www.bde.es. **PG** 31. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** G10. **KW** Government Bonds.

AB This paper compares the Spanish government bond markets to the main European ones. Among the characteristics of Spanish public securities, the paper notes the high degree of uniformity and concentration in a few instruments, which makes it very liquid. The organization of the secondary market is analyzed, distinguishing between systems of quoting-trading and systems of registry-custody-settlement-clearing. The former are used to address issues such as the transfer of trading towards foreign financial centers, and the market makers. The latter help to discuss the working of repo operations and the degree of information and transparency they provide. The paper also considers the implications of the taxation of these financial instruments.

Radhakrishnan, Suresh

TI Information, Transaction Costs, and Patterns in Stock Returns After Earnings Announcements. **AU** Bartov, Eli; Krinsky, Itzhak; Radhakrishnan, Suresh.

Rady, Sven

TI Optimal Experimentation in a Changing Environment. **AU** Keller, Godfrey; Rady, Sven.

Ramon Martínez-Resano, Jose

PD January 1997. **TI** Los Contratos DIFF y el Tipo de Cambio. **AA** Banco de España. **SR** Banco de España. Servicio de Estudios. Documento de Trabajo: 9702; Banco de España. Sección de Publicaciones. Negociado de Distribución y Gestión. Alcalá 50. 28014 Madrid. Website:www.bde.es. **PG** 26. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** F31, G13. **KW** Future Contracts. Exchange Rate. Arbitrage Pricing Model.

AB Contracts based on the differential between the price of the government debt of two countries (DIFF), traded in the Spanish Financial Futures Market (MEFF), allow to replicate the procedures typically used in the trading of interest rate

differentials. However, unlike the latter, DIFF contracts do not require to operate in the foreign exchange market because of the change in the currency denomination of the underlying security in these contracts. This paper analyses the role of the exchange rate in DIFF contracts using an arbitrage pricing model. The dynamic replication of DIFF contracts through transactions in the respective domestic futures and foreign exchange markets suggests that the covariance between the exchange rate dynamic and the foreign future dynamic should be reflected in the price of these contracts. Thus, in DIFF contracts, the exchange rate becomes "frozen" even though its effects do not disappear completely.

PD June 1997. **TI** Los Mercados de Derivados y el Euro. **AA** Banco de España. **SR** Banco de España, Servicio de Estudios, Documento de Trabajo: 9709; Banco de España, Sección de Publicaciones, Negociado de Distribución y Gestión, Alcalá 50, 28104 Madrid. Website:www.bde.es. **PG** 22. **PR** Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** G10. **KW** Derivative Markets. Monetary Integration. Clearing Houses.

AB This paper analyzes the potential effects of monetary integration on the market structure of public debt and interest rates derivatives in Europe. Considering the determinants of the demand for derivatives and the organization of the markets, it can be concluded that a process of concentration will occur in the best situated market, possibly LIFFE. Besides, the market for "complementary" derivatives, that allow to trade the "solvency differential" between countries, where better possibilities of development for national markets exist, will be reinforced. In this sense, it is expected the further development of the swap market.

Ramstetter, Eric D.

TI Accounting for Outward Direct Investment from Hong Kong and Singapore: Who Controls What? **AU** Low, Linda; Ramstetter, Eric D.; Yeung, Henry Wai-Chung.

Rasmussen, Bo Sandemann

PD March 1997. **TI** International Tax Competition, Tax Cooperation and Capital Controls. **AA** University of Aarhus. **SR** Aarhus Department of Economics Working Paper: 1997/09; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website:www.eco.aau.dk/afn. **PG** 23. **PR** no charge. **JE** F21, H21, H26. **KW** International Tax Competition. Capital Controls. Tax Cooperation. Endowments. Efficiency.

AB Tax competition between independent authorities is known to lead to inefficient outcomes, implying there is scope for cooperation. In an international framework where the authorities are national governments, the undesirable features of tax competition may alternatively be mitigated by imposing restrictions on international capital flows. Using a two-country model it is shown that capital controls may fully remedy the adverse effects of tax competition and thereby render tax cooperation superfluous. In more general cases, however, capital controls have some undesirable side-effects, leaving room for cooperative actions. Moreover, the mere option of imposing capital controls may promote the implementation of tax cooperation.

PD May 1997. **TI** Long Run Effects of Employment and

Payroll Taxes in an Efficiency Wage Model. AA University of Aarhus. SR Aarhus Department of Economics Working Paper: 1997/08; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. PG 9. PR no charge. JE H22, J41. KW Efficiency Wages. Long Run. Employment Taxes. Payroll Taxes. Tax Equivalence.

AB A long run efficiency wage model with free entry and exit is proposed. It is demonstrated that a balanced-budget substitution of employment taxes for payroll taxes leads to a higher long run equilibrium level of employment.

TI Effort, Taxation and Unemployment. AU Andersen, Torben M.; Rasmussen, Bo Sandemann.

PD November 1997. **TI** Non-Equivalence of Employment and Payroll Taxes in Imperfectly Competitive Labor Markets. AA University of Aarhus. SR Aarhus Department of Economics Working Paper: 1997/22; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. PG 17. PR no charge.

JE H22, J51. **KW** Employment Taxes. Payroll Taxes. Tax Equivalence. Employment. Wage Bargaining. Efficiency Wage.

AB Equilibrium allocations in competitive labor market models are independent of whether labor taxes on firms are levied as employment taxes or payroll taxes, for given tax revenue. Turning to non-competitive labor market models, like wage bargaining of efficiency wage models, the two taxes cease to be equivalent in the sense that balanced-budget substitutions of one tax for the other affect equilibrium allocations. However, while more extensive use of payroll taxes always increases equilibrium employment in the wage bargaining model, it may lead to a lower level of equilibrium employment in the efficiency wage model.

Rausser, Gordon C.

PD July 1997. **TI** Bioprospecting with Prior Ecological Information. AU Rausser, Gordon C.; Small, Arthur A. AA University of California, Berkeley. SR University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 819; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/uch.html. PG 52. PR \$13.00 Domestic; \$26.00 International Surface Rate; not available after publication. JE O34. KW Biodiversity. Intellectual Property. Ecological Information.

AB The role of ecological and taxonomic knowledge in biodiversity prospecting is examined. A sequential-search model of biodiversity prospecting is developed in which genetic materials are differentiated by prior information. When search procedures are optimized to take account of available information, materials with unusually high priors command significant information rents. These rents can be large, even when genetic materials are not themselves scarce. When genetic materials are abundant, an increase in the potential profitability of product discovery has virtually no effect on the value of any site; and technology improvements that lower search costs induce a drop in the value of promising site. Results of a numerical simulation suggest that bioprospecting information rents could, in some cases, be large enough to finance meaningful biodiversity conservation.

PD May 1998. **TI** Valuing Research Leads:

Bioprospecting and the Conservation of Genetic Resources. AU Rausser, Gordon C.; Small, Arthur A. AA University of California, Berkeley. SR University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 819R; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/uch.html. PG 31. PR \$7.75 Domestic; \$15.50 International Surface Rate; not available after publication. JE O34, O16. KW Research. Genetic Resources. Biodiversity Conservation. Intellectual Property. Ecological Information.

AB Bioprospecting has been touted as a source of finance for biodiversity conservation. Recent work has suggested that the bioprospecting value of the marginal unit of genetic resources is likely to be vanishingly small, creating essentially no conservation incentive. This result is shown to flow specifically from a stylized description of the research process as one of brute-force testing, unaided by an organizing scientific framework. Scientific models channel research efforts towards leads for which the expected productivity of discoveries is highest. Leads of unusual promise then command information rents, associated with their role in reducing the costs of search. When genetic materials are abundant, information rents are virtually unaffected by increases in the profitability of product discovery, and decline as technology improvements lower search costs. Numerical simulation results suggest that, under plausible conditions, the bioprospecting value of certain genetic resources could be large enough to support market-based conservation of biodiversity.

Ravn, Morton O.

PD May 1997. **TI** On Adjusting the HP-Filter for the Frequency of Observations. AU Ravn, Morton O.; Uhlig, Harald. AA Ravn: University of Southampton, Universitat Pompeu Fabra, Center for Economic Policy Research and Center for Non-Linear Modelling in Economics. Uhlig: Center for Economic Research, Tilburg University and Center for Economic Policy Research. SR Tilburg Center for Economic Research Discussion Paper: 9750; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 26. PR no charge. JE C10, C22, C63, E32, F14. KW HP-Filter. Observation Frequency. Business Cycles. Output Volatility.

AB This paper studies how the HP-filter should be adjusted, when changing the frequency of observations. The usual choices in the literature are to adjust the smoothing parameter by multiplying it with either the square of the observation frequency ratios or simply with the observation frequency. In contrast, the paper recommends to adjust the filter parameter by multiplying it with the fourth power of the observation frequency ratios. Based on this suggestion, some well-known comparisons of business cycles moments across countries and time periods are recomputed. In particular, we overturn a finding by Backus and Kehoe on the historical changes in output volatility and return instead to older conventional wisdom (Bailey, 1978, Lucas, 1977): based on the new HP-filter adjustment rule, output volatility turns out to have decreased after the Second World War.

Razin, Assaf

PD December 1996. **TI** Tax Burden and Migration: A

Political Economy Perspective. AU Razin, Assaf; Sadka, Efraim. AA Tel Aviv University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5850; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 11. PR \$5.00. JE F22, H22, H23, J24, J61. KW International Migration. Taxation. Redistribution. Human Capital.

AB The extent of taxation and redistribution policy is generally determined at a political-economy equilibrium by a balance between those who gain and those who lose from a more extensive tax-transfer policy. In a stylized model of migration and human capital formation the authors find, somewhat against conventional wisdom, that low-skill migration may lead to a lower tax burden and less redistribution than without migration, even though the migrants (naturally) join the pro-tax cum transfer coalition.

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

Rebers, Eugene

PD July 1997. TI When to Fire Bad Managers: The Role of Collusion Between Management and Board of Directors. AU Rebers, Eugene; Beetsma, Roel M. W. J.; Peters, Hans. AA Rebers and Peters: Maastricht University. Beetsma: Maastricht University and Center for Economic Policy Research. SR Tilburg Center for Economic Research Discussion Paper: 9769; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 20. PR no charge. JE J33, L22. KW Corporate Governance. Hierarchies. Incentive Compensation. Collusion. Board of Directors.

AB We develop a model in which a shareholder hires a director to monitor a manager who faces stochastic firing costs. We study the optimal incentive scheme for the director, allowing for the possibility that the manager bribes the director in order to change his firing intentions. Such collusion may be in the interest of the shareholder, because it avoids the need to (ex ante) compensate the manager for very high realizations of his firing costs (these are precisely the cases in which collusion occurs).

Regev, Haim

TI The Demand for Labor and Job Turnover: Israeli Manufacturing 1970- 1994. AU Gronau, Reuben; Regev, Haim.

Reijnierse, Hans

TI The Consistency Principle for Set-Valued Solutions and a New Direction for the Theory of Equilibrium Refinements. AU Dufwenberg, Martin; Norde, Henk; Reijnierse, Hans; Tijs, Stef.

Rey, Helene

TI A Portfolio Approach to a Cross-Sectoral and Cross-National Investment Strategy in Transition Economics. AU Buitert, Willem H.; Lago, Ricardo; Rey, Helene.

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

Reynolds, Stanely S.

TI Price Movements Over the Business Cycle in US Manufacturing Industries. AU Wilson, Bart J.; Reynolds, Stanely S.

Richardson, James

PD May 1997. TI Wage Subsidies for the Long-Term Unemployed: A Search Theoretic Analysis. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 347; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 22. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE E24, J28, J68, J64. KW Wage Subsidies. Long-Term Unemployment. Active Labor. Market Policy.

AB The persistence of mass unemployment in many OECD countries in the 1980's and 1990's has led to renewed interest in active labor market policies. We examine one such policy, a wage subsidy for employers hiring the long-term unemployed, using a search-theoretic framework. We assume that long-term unemployment leads to a loss of human capital, and that a subsidy can offset the consequent training costs faced by employers hiring the long-term unemployed. We argue that unemployment would be unambiguously reduced by such a policy. Furthermore, the often-made criticism of wage subsidies that they mainly lead to substitution, merely churning the unemployed, is misplaced. There are positive externalities to substitution that lead firms to open more vacancies, many of which in turn will be filled by the short-term unemployed.

Ricks, William E.

TI Stock Price Behavior Around Announcements of Write-Offs. AU Bartov, Eli; Lindahl, Frederick W.; Ricks, William E.

Ridder, Ad

PD February 1997. TI How Larger Demand Variability May Lead to Lower Costs in the Newsvendor Problem. AU Ridder, Ad; van der Laan, Erwin; Salomon, Marc. AA Ridder: Vrije Universiteit Amsterdam. van der Laan: Erasmus University. Salomon: Tilburg University. SR Tilburg Center for Economic Research Discussion Paper: 9731; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 14. PR no charge. JE E22. KW Newsvendor Problem. Demand Variability. Stochastic Dominance.

AB In this paper we consider the Newsvendor Problem. Intuition may lead to the hypothesis that in this stochastic inventory problem a higher demand variability results in larger variances and in higher costs. In a recent paper, Song has proved that the intuition is correct for many demand distributions that are commonly used in practice, such as for the Normal distributions for which the intuition is misleading, i.e., for which larger variances occur in combination with lower costs. To characterize these demand distributions we use stochastic dominance relations.

Rob, Rafael

TI Solow vs. Solow: Machine Prices and Development. AU Jovanovic, Boyan; Rob, Rafael.

Robins, Philip K.

TI Would Financial Incentives for Leaving Welfare Lead Some People to Stay on Welfare Longer? An Experimental Evaluation of Entry Effects in the Self-Sufficiency Project. **AU** Card, David; Robins, Philip K.; Lin, Winston.

Robinson, Peter

PD July 1997. **TI** The Myth of Parity of Esteem: Earnings and Qualifications. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 354; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 75. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** I21, I28, J31. **KW** Education. Wages. Occupation. Qualifications.

AB There is no parity of esteem between academic and vocational qualifications in the labor market. Data from the Labor Force Survey show that on average men and women working full-time with academic qualifications at one level in the national qualifications framework earn about the same as men and women with vocational qualifications set nationally one level higher. So those with A levels have earnings similar to those with higher or level 4 vocational qualifications, those with 5 or more O levels or higher grade GCSE's have earnings similar to those with level 3 vocational qualifications, and those with 1-4 O levels or higher grade GCSE's have earnings similar to those with level 2 vocational qualifications. These higher earnings occur firstly because academic qualifications at a given level are more successful in buying access to more highly paid occupations. Secondly, within the most highly paid managerial, professional and technical occupations, academic qualifications are associated with higher earnings. These findings raise significant issues for public policy, calling into question the way in which the UK's National Targets for Education and Training have been formulated and much work on international comparisons of educational attainment.

PD July 1997. **TI** Measure for Measure a Critical Note on the National Targets for Education and Training and International Comparisons of Educational Attainment. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 355; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 26. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** I38, J21, J31. **KW** Education. Wages. Government Policy.

AB The National Education and Training Targets appear to dominate the public policy debate, though outside of policy making and influencing circles they are in fact little known. This paper argues that the definition of and measurement of progress towards those Targets are based on equivalencies between qualifications which are subjective and in some cases arbitrary. Moreover, the UK Government's own Skills Audit treats some qualifications in a manner which is completely contradictory to the way the National Advisory Council for Education and Training Targets treats them. The paper argues for using the earnings associated with the holding of different qualifications as an objective way of ranking qualifications. Qualifications should be held to be equivalent if they deliver similar earnings in the labor market. It is shown how this

approach would significantly alter the proportion of the UK workforce held to be at different levels of attainment. If this method was used to look at international comparisons of educational attainment it might also alter the relative ranking of countries. It is pointed out that the earnings of those holding Scottish Highers are significantly lower than the earnings of those holding 2 or more A levels, and yet it is asserted that these two qualifications are equivalent in public policy discussions. If we cannot get right comparisons between England and Scotland, what makes us think that we have got right any of the international comparisons?.

Robinson, Stephen M.

TI Sample-Path Solutions for Simulation Optimization Problems and Stochastic Variational Inequalities. **AU** Gurkan, Gul; Ozge, Yonca A.; Robinson, Stephen M.

TI Sample-Path Solution of Stochastic Variational Inequalities. **AU** Gurkan, Gul; Ozge, Yonca A.; Robinson, Stephen M.

Rodriguez, Pedro

TI Central Bank Autonomy and Exchange Rate Regimes -- Their Effects on Monetary Accommodation and Activism. **AU** Cukierman, Alex; Rodriguez, Pedro; Webb, Steven.

Rodrik, Dani

PD January 1997. **TI** Trade, Social Insurance, and the Limits to Globalization. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5905; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 22. **PR** \$5.00. **JE** F13, F15, F41, H50. **KW** Protectionism. International Trade. Taxation. Economic Integration. Social Insurance.

AB International economic integration increases exposure to external risk and intensifies domestic demands for social insurance through government programs. But international economic integration also reduces the ability of governments to respond to such pressure by rendering the tax base footloose. With globalization proceeding apace, the social consensus required to maintain domestic markets open to trade may erode to the point where a return to protection becomes a serious possibility.

Roe, T. L.

TI How Fiscal Mis-Management May Impede Trade Reform: Lessons From an Intertemporal Multi-Sector General Equilibrium Model for Turkey. **AU** Diao, X.; Roe, T. L.; Yelden, A. E.

Rogers, John H.

TI Output and the Real Exchange Rate in Developing Countries: An Application to Mexico. **AU** Kamin, Steven B.; Rogers, John H.

TI A Guide to FRB/Global. **AU** Levin, Andrew T.; Rogers, John H.; Tryon, Ralph W.

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

Rogerson, Richard

TI Institutions and Labor Reallocation. **AU** Bertola, Giuseppe; Rogerson, Richard.

Rosen, Sherwin

PD December 1996. **TI** Manufactured Inequality. **AA** University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5846; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 14. **PR** \$5.00. **JE** D31, D63, J19. **KW** Labor Studies. Inequality. Preferences.

AB Many discrete life choices are stratified by income. Stratification and sorting often manifest state-dependent preferences in which the marginal utility of income (consumption) depends on the outcome of prior choices. The natural market equilibrium stratification is for rich people to live in the city, where their money has more value, and for poor people to live in the country, where money is less productive. But before location is chosen, then an a priori von Neuman-Morgenstern utility function over both choices can take the Friedman-Savage form, providing Pareto efficient social demands for inequality. If there is not enough inequality to produce the socially optimal stratification to begin with, inequality is socially manufactured. People voluntarily participate in gambles and lotteries in which the winners are rich and live in the exciting places and the losers are poor and choose the quiet life.

Roubini, Nouriel

TI Optimal Government Spending and Taxation in Endogenous Growth Models. **AU** Corsetti, Giancarlo; Roubini, Nouriel.

Rouse, Cecilia Elena

TI Orchestrating Impartiality: The Impact of Blind Auditions on Female Musicians. **AU** Goldin, Claudia; Rouse, Cecilia Elena.

TI Orchestrating Impartiality: The Impact of Blind Auditions on Female Musicians. **AU** Goldin, Claudia; Rouse, Cecilia Elena.

PD July 1997. **TI** Further Estimates of the Economic Return to Schooling from a New Sample of Twins. **AA** Princeton University and National Bureau of Economic Research. **SR** Princeton Industrial Relations Section Working Paper: 388; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 18. **PR** \$1.00. **JE** I21, J24, J31. **KW** Identical Twins. Education. Human Capital. Genetic Ability. Wages.

AB In a recent, and widely cited paper, Ashenfelter and Krueger (1994) use a new sample of identical twins to test whether schooling represents an investment in human capital or is merely a proxy for genetic ability. This comment re-examines Ashenfelter and Krueger's estimates using three additional years of the twins survey. The author estimates that the return to schooling among identical twins is around 10-12 percent per years of schooling completed. Most importantly, unlike the results reported in Ashenfelter and Krueger, the author finds that the within-twin regression estimate of the effect of schooling on the log wage is smaller than the cross-sectional estimate, implying a small upward bias in the cross-sectional estimate. Ashenfelter and Krueger's estimates are

insignificantly different from those presented here, however, suggesting that the difference is due to sampling error.

PD January 1998. **TI** Schools and Student Achievement: More Evidence from the Milwaukee Parental Choice Program. **AA** Princeton University and National Bureau of Economic Research. **SR** Princeton Industrial Relations Section Working Paper: 396; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 33. **PR** \$1.50. **JE** I21. **KW** School Vouchers. Class Size. Student Achievement. Education.

AB The author reviews the existing evaluations of the effect of the Milwaukee Parental Choice Program on student achievement. Two of the three existing papers report significant gains in math for the choice students and two of the three studies report no significant effects in reading. The author also extends the analysis to compare the achievement of students in the choice schools to students in three different types of public schools: regular attendance area schools, city-wide schools, and attendance area schools with small class sizes and supplemental funding from the state of Wisconsin ("P-5"). The results suggest that students in P-5 schools have similar math test score gains to those in the choice schools, and students in the P-5 schools outperform students in the choice schools in reading. In contrast, students in the city-wide schools score no differently than the students in regular attendance area schools in both math and reading.

Ruttan, Vernon W.

PD April 1998. **TI** Growth Economics and Development Economics: What Should Development Economists Learn (if anything) From the New Growth Theory? **AA** University of Minnesota. **SR** University of Minnesota Economic Development Center Bulletin: 98/04; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 53. **PR** no charge. **JE** O14, O15, O33, O40, Q10. **KW** Development. Growth. Technological Change.

AB Since their emergence as distinct fields of inquiry in the early post World War II period, there has been an uneasy relationship between growth economics and development economics. The emergence of a richer new growth economics has opened up the possibilities of more fruitful dialogue between the two subdisciplines. In spite of recent advances, particularly with respect to human capital, an understanding of differences in growth rates and income levels across countries remain elusive. Further advances will require that growth economists broaden their research agenda to embrace a number of concepts that have become conventional in development economics.

Ryu, Hang K.

TI Alternative Functional Forms for Production, Cost and Returns to Scale Functions. **AU** Zellner, Arnold; Ryu, Hang K.

TI Bayesian Method of Moments (BMOM) Analysis of Parametric and Semiparametric Regression Models. **AU** Zellner, Arnold; Tobias, Justin; Ryu, Hang K.

Sacher, Seth B.

PD April 1998. **TI** Physician Networks, Integration and Efficiency. **AU** Sacher, Seth B.; Silvia, Louis. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau

of Economics Working Paper: 218; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave., NW, Room 3110, Washington, D.C. 20580. Website: bperson@ftc.gov. PG 25. PR no charge. JE I11, L14, L44. KW Antitrust. Physician Markets. Horizontal Practices. Asset Specificity.

AB The creation of physician networks has been an important part of the managed care revolution. While the anticompetitive dangers of physician-controlled networks are clear, there has been little theoretical or empirical work on why physician control might be efficient relative to other control alternatives. This paper offers a theory, based on asset specificity in the face of contractual completeness, explaining why physician control might be efficient. The analysis implies that harsh antitrust treatment of physician controlled networks, based on an observation that networks may be organized without physician control, is not appropriate. Recent revisions in antitrust policy are consistent with a more expansive view of the efficiency potential of physician-controlled networks.

Sacheti, Sandeep

TI Common Ground Between Free-Traders and Environmentalists. AU Karp, Larry; Sacheti, Sandeep; Zhao, Jinhua.

Sadka, Efraim

TI Tax Burden and Migration: A Political Economy Perspective. AU Razin, Assaf; Sadka, Efraim.

Sadoulet, Elisabeth

TI Land Allocation Under Dual Individual-Collective Use in Mexico. AU McCarthy, Nancy; de Janvry, Alain; Sadoulet, Elisabeth.

TI Endogenous Provision and Appropriation in the Commons. AU de Janvry, Alain; McCarthy, Nancy; Sadoulet, Elisabeth.

TI Family and Community Networks in Mexico-US Migration. AU Winters, Paul; de Janvry, Alain; Sadoulet, Elisabeth.

TI Localized and Incomplete Mutual Insurance. AU Murgai, Rinku; Winters, Paul; Sadoulet, Elisabeth; de Janvry, Alain.

TI Rural Development and Rural Policy. AU de Janvry, Alain; Murgai, Rinku; Sadoulet, Elisabeth.

TI Common Pool Resource Appropriation Under Costly Cooperation. AU McCarthy, Nancy; Sadoulet, Elisabeth; de Janvry, Alain.

Salant, Stephen W.

TI Can Government Gold Be Put to Better Use?: Qualitative and Quantitative Effects of Alternative Policies. AU Henderson, Dale W.; Irons, John S.; Salant, Stephen W.; Thomas, Sebastian.

TI Can Government Gold Be Put to Better Use?: Qualitative and Quantitative Effects of Alternative Policies. AU Henderson, Dale W.; Irons, John S.; Salant, Stephen W.; Thomas, Sebastian.

Salido-Lopez, David J.

PD 1997. TI La Dinamica de los Margenes en Espana.

AU Salido-Lopez, David J.; Velilla, Pilar. AA Banco de Espana. SR Banco de Espana, Servicio de Estudios, Documentos de Trabajo: 9705; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. Website: www.bde.es. PG 44. PR Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. JE not available. KW not available.

AB This paper is written in Spanish.

Salomon, Marc

TI How Larger Demand Variability May Lead to Lower Costs in the Newsvendor Problem. AU Ridder, Ad; van der Laan, Erwin; Salomon, Marc.

Samuelson, Larry

TI Risk Dominance, Payoff Dominance and Probabilistic Choice Learning. AU Battalio, Raymond; Samuelson, Larry; Van Huyck, John.

Sanchis, Alicia

TI Unemployment Persistence, Central Bank Independence and Inflation Performance in the OECD Countries. AU Alberola, Enrique; Manuel Marques, Jose; Sanchis, Alicia.

Sastre, M. Teresa

TI La Utilizacion de los Indices de Condiciones Monetarias Desde la Perspectiva de un Banco Central. AU Caballero, Juan Carlos; Martinez-Pages, Jorge; Sastre, M. Teresa.

Satchell, Stephen E.

PD February 1997. TI The Pricing of Marked-To-Market Contingent Claims in a No-Arbitrage Economy. AU Satchell, Stephen E.; Stapleton, Richard C.; Subrahmanyam, Marti G. AA Satchell: Trinity College. Stapleton: Lancaster University. Subrahmanyam: New York University. SR New York University, Salomon Center Working Papers: S/97/01; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. PG 25. PR \$5.00 each prepaid; \$100.00 yearly subscription. JE G13. KW Asset Prices. Option Pricing. Contingent Pricing.

AB This paper assumes that the underlying asset prices are lognormally distributed, and derives necessary and sufficient conditions for the valuation of options using a Black-Scholes type methodology. It is shown that the price of a futures-style, marked-to-market option is given by Black's formula if the pricing kernel is lognormally distributed. Assuming that this condition is fulfilled, it is then shown that the Black-Scholes formula prices a spot-settled contingent claim, if the interest-rate accumulation factor is lognormally distributed. Otherwise, the Black-Scholes formula holds if the product of the pricing kernel and the interest-rate accumulation factor is lognormally distributed.

Saunders, Anthony

TI The Effects of Bank Mergers and Acquisitions on Small Business Lending. AU Berger, Allen N.; Saunders, Anthony; Scalise, Joseph M.; Udell, Gregory F.

PD September 1997. TI The Determinants of Bank

Interest Rate Margins: An International Study. AU Saunders, Anthony; Schumacher, Liliana. AA Saunders: New York University. Schumacher: George Washington University. SR New York University, Salomon Center Working Papers: S/97/17; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. PG 18. PR \$5.00 each prepaid; \$100.00 yearly subscription. JE E43, E44, E58, G21, G28. KW Banks. Interest Rate Margins. Regulation. Volatility. Market Structure. AB This paper applies the Ho-Saunders (1981) model of the determinants of bank interest margins to 7 OECD countries. The model allows the identification of that part of bank interest margins caused by (1) market structure, (2) regulation, and (3) interest rate volatility. It is shown that interest volatility has a consistently positive effect on bank margins as does bank market structure across these 7 countries.

PD October 1997. TI Bank Capital and Bank Structure: A Comparative Analysis of the US, UK and Canada. AU Saunders, Anthony; Wilson, Berry K. AA Saunders: New York University. Wilson: Federal Communications Commission. SR New York University, Salomon Center Working Papers: S/97/25; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. PG 39. PR \$5.00 each prepaid; \$100.00 yearly subscription. JE Not available. KW Not available. AB Not available.

Savin, N. E.

TI The Effect of Nuisance Parameters on Size and Power; LM Tests in Logit Models. AU Wurtz, Allan H.; Savin, N. E.

Sawchuk, Gary

TI Cost of Capital for the United States, Japan, and Canada: An Attempt at Measurement Based on Individual Company Records and Aggregate National Accounts Data. AU Ando, Albert; Hancock, John; Sawchuk, Gary.

Scalise, Joseph M.

TI The Effects of Bank Mergers and Acquisitions on Small Business Lending. AU Berger, Allen N.; Saunders, Anthony; Scalise, Joseph M.; Udell, Gregory F.

TI The Effects of Bank Mergers and Acquisitions on Small Business Lending. AU Berger, Allen N.; Saunders, Anthony; Scalise, Joseph M.; Udell, Gregory F.

Schaling, Eric

TI Central Bank Independence: A Sensitivity Analysis. AU Eijffinger, Sylvester C. W.; Schaling, Eric; Hoeberichts, Marco.

TI Why Money Talks and Wealth Whispers: Monetary Uncertainty and Mystique. AU Eijffinger, Sylvester C. W.; Hoeberichts, Marco; Schaling, Eric.

Scheepens, Joris P. J. F.

PD January 1995. TI Collusion and Hierarchy in Banking. AA ABN Amro Bank. SR Tilburg Center for Economic Research Discussion Paper: 9701; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website:

cwis.kub.nl/few5/center/center.htm. PG 28. PR no charge. JE D81, G21, L23. KW Collusion. Hierarchy. Banking.

AB This paper studies an agency problem between a bank and its loan officer in the process of loan origination. The loan officer privately observes a prospective borrower's quality. A high-risk borrower may offer a side transfer to the loan officer (collusion) to induce him/her to understate the borrower's risk when reporting to the bank owner. The bank, by involving a credit committee in the loan approval process, may prevent this problem. Banks optimally set a loan limit above which all loans must be approved by the committee. Collusion may occur in equilibrium only if the bank cannot precommit to the probability that the credit committee actually checks the loan officer's credit proposal.

Schineller, Lisa M.

PD March 1997. TI An Econometric Model of Capital Flight From Developing Countries. AA Federal Reserve Board. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 579; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us. PG 48. PR no charge. JE F31, F32. KW Capital Flight. Macroeconomic Risk. Panel Data.

AB This paper analyzes capital flight from a group of seventeen developing nations over the period 1978 to 1993. The paper briefly discusses several empirical definitions of capital flight and presents estimates of capital flight for the sample based on some of these measures. In general, the data reveal periodic episodes of dramatic flight through the late 1980's, at which point many nations began to experience strong capital inflows. Anecdotal evidence for the nations in our sample underpins our hypothesis that capital flight is driven by a heightened, pervasive risk which reflects the degree of domestic macroeconomic imbalance which is domestically undiversifiable. Our econometric model of the determinants of capital flight extends previous empirical studies of flight by expanding both the cross section of nations and time horizon of analysis. Given the panel data set, we consider a country specific error component to account for the possibility of unobserved country heterogeneity and employ fixed-effects and random-effects estimation. We instrument for potentially endogenous explanatory variables and in doing so consider a fixed-effects system. The results, based on several different measures of flight, highlight the importance of modeling flight with a country specific error component.

PD October 1997. TI A Nonlinear Econometric Analysis of Capital Flight. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 594; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us. PG 40. PR no charge. JE E22. KW Capital Flight. Macroeconomic Risk. Panel Data. Two-Threshold Tobit.

AB This paper develops a nonlinear econometric model of the determinants of capital flight for eighteen developing countries over the period 1978 to 1988. During most of the 1980's, capital flight proved difficult to reverse. Besides an uncertain domestic policy environment, costs associated with such an investment decision might have delayed flight reversal.

Costs that characterize flight reversal could generate potentially significant barriers to continual adjustment of an investment position. This in turn would generate a nonlinear relationship between flight and its determinants, which reflect the degree of domestic macroeconomic imbalance. To detect the existence, and importance, of cost-driven thresholds we model flight within the context of a friction, or two-threshold Tobit, model. Given the panel data set, we consider a country specific error component to account for the possibility of unobserved country-specific heterogeneity. To correct for endogeneity among the regressors in the random-effects nonlinear estimation, we implement Newey (1987). While the data seemingly do not support the existence of cost-driven thresholds for flight, the central government surplus, premium for foreign exchange in the black market and the presence of an IMF adjustment program are all significantly related to flight. The negative relationship between fiscal balances and flight highlights the desire by investors to escape future taxation directly, and indirectly via monetization of fiscal deficits, by undertaking capital flight.

Schmidt, Glen M.

PD March 1997. **TI** Does Technology Leadership Require the Ability to Produce at Lower Cost? **AU** Schmidt, Glen M.; Porteus, Evan L. **AA** Schmidt: Stanford Business School. Porteus: Sanwa Bank and Stanford Business School. **SR** Stanford Graduate School of Business Research Paper: 1431; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 29. **PR** no charge. **JE** D21, L21, O31, O33. **KW** Cost Competence. Product Innovation. Process Innovation. Technological Change. Vertical Differentiation.

AB In high-tech, a firm may seek to master new technologies that lead to cutting-edge products, rather than aggressively pursue cost reduction. But if cost reduction in the current technology enables the firm to achieve a cost advantage in the next technology as well, cost leadership may carry with it strategic implications. The authors develop a simple model that suggests that in order for a firm to insure its position as the technology leader, it may be necessary for the firm to hold a unit production cost advantage with the next product. The authors refer to such an advantage as the firm's "cost competence." Two other competencies may also be essential to insuring technology leadership, namely, the ability to pursue the new technology by investing a sufficiently small amount, and the ability to master the new technology, if pursued, with a sufficiently high probability of success.

Schnytzer, Adi

TI Why Do People Support Dictators? (Popularity versus Political Exchange). **AU** Sustersic, Jancz; Schnytzer, Adi.

Schroder, Philipp J. H.

PD January 1998. **TI** How Stakes in Restructuring Put Restructuring at Stake. **AA** University of Aarhus. **SR** Aarhus Department of Economics Working Paper: 1998/01; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. **PG** 36. **PR** no charge. **JE** D23, J50, L20. **KW** Privatization. Restructuring. Insider Shares. Corporate Control. Transition.

AB In a model where privatization of inefficient SOE's is performed by allocating shares to different types of agents in

society we analyze the conflict between shareholder and stakeholder interests. In particular, some of those that receive shares in a firm, that suffers from inefficiency, do have a stakeholder interest in the same inefficiency. Additionally, we introduce a dependence of agent (and hence firm) decisions on the entire privatization program: for one type of share/stakeholder the effect with which inefficiency enters his stakeholder interest can switch sign depending on the overall economic structure that results from privatization. The paper determines the effects on restructuring (elimination of the inefficiency) in a general share/stakeholder conflict setup. It is found that for sensible specifications of the conflict restructuring will fall short of complete efficiency. The dependence of one agents stakeholder function of the overall privatization structure, can amplify this effect. Further we introduce a privatizing government that in this setup maximizes an objective function, taking into account the overall restructuring level and political support from the distribution of shares.

PD January 1998. **TI** The Fiscal Constraint to Restructuring of Firms in Transition Economies. **AA** University of Aarhus. **SR** Aarhus Department of Economics Working Paper: 1998/02; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. **PG** 26. **PR** no charge. **JE** H69, L33, P41. **KW** Restructuring. Privatization. Government Deficit. Transition.

AB The restructuring process of formerly state owned enterprises, including dismissal of excess labor, has been slow. Since the recovery of transition economies depends on the restructured sector, a convincing take-off has been delayed. Many arguments have been forwarded to explain the low adaptation speed. This paper focuses on an additional structural barrier at the governmental level. Here the privatization program -- leading to restructuring or not -- is designed. Transition governments are in a fiscal squeeze: on the one hand restructuring relocates costs from the restructured firms to the public budget, on the other hand - in order to contain inflationary pressures - the public deficit should be kept within narrow limits. This problem is analyzed by means of a stylized, dynamic model.

Schumacher, Liliana

TI The Determinants of Bank Interest Rate Margins: An International Study. **AU** Saunders, Anthony; Schumacher, Liliana.

Schwabe, Kurt A.

TI Does Nature Limit Environmental Federalism? **AU** Smith, V. Kerry; Schwabe, Kurt A.; Mansfield, Carol.

Segal, Uzi

PD July 1997. **TI** Let's Agree that All Dictatorships are Equally Bad. **AA** University of Western Ontario. **SR** University of Western Ontario Papers in Political Economy: 82; Department of Economics, Social Science Center, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.ssc1.uwo.ca/economics. **PG** 23. **PR** no charge. **JE** D71, D72, P40. **KW** Dictatorships. Social Policy.

AB A social policy is a rule which assigns each possible set of endowments an allocation of these endowments among

members of society. This paper assumes that individuals have preferences over all possible social policies. The author offers a set of axioms which imply the best social policy is to maximize a weighted sum of individual utility levels. The weight of an individual given a certain bundle of resources is the inverse of the maximal utility gain this person may enjoy from this bundle. The key axiom is that all individuals agree that giving all the resources of the economy always to the same person is bad, regardless of who that person is. Members of society may have different preferences over social policies, but they all agree that the above social policy is best.

Sethi, Rajiv

TI Uneven Development and the Dynamics of Distortion.
AU Skott, Peter; Sethi, Rajiv.

Shannon, Chris

TI Uniqueness, Stability, and Comparative Statics in Rationalizable Walrasian Markets. **AU** Brown, Donald J.; Shannon, Chris.

Shenker, Scott

TI Distributive and Additive Costsharing of an Homogeneous Good. **AU** Moulin, Herve; Shenker, Scott.

Shiller, Robert J.

TI The Significance of the Market Portfolio. **AU** Athanasoulis, Stefano; Shiller, Robert J.

PD February 1998. **TI** Indexed Units of Account: Theory and Assessment of Historical Experience. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1171; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 41. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** E42. **KW** Ghost Money. Imaginary Money. Escalator Clause. Personal Income. Overlapping Generations.

AB This paper discusses the Unidad de Fomento (UF), an indexed unit of account, which has been used in Chile since 1967, and which has been copied in Columbia, Ecuador, Mexico, and Uruguay. The UF is a sort of money that has guaranteed real purchasing power, though it is not a currency and is not used as a medium of exchange. The reasons for creating such a unit are discussed from the standpoint of monetary theory. The experience with such units in Chile is discussed. It is argued that important practical problems in implementing indexation are solved by creating such indexed units of account. It is also argued that the use of the units in wage setting need not be inflationary, if the units of account are defined properly. The author advocates creating such units in other countries, even countries with relatively low rates of inflation.

PD February 1998. **TI** Human Behavior and the Efficiency of the Financial System. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1172; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 48. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** G10. **KW** Efficient Market. Speculation. Stock Market. Psychology. Behavioral Finance.

AB Recent literature in empirical finance is surveyed in its relation to underlying behavioral principles, principles which come primarily from psychology, sociology and anthropology.

The behavioral principles discussed are: prospect theory, regret and cognitive dissonance, anchoring, mental compartments, overconfidence, over- and underreaction, representativeness heuristic, the disjunction effect, gambling behavior and speculation, perceived irrelevance of history, magical thinking, quasi-magical thinking, attention anomalies, the availability heuristic, culture and social contagion, and global culture.

Shleifer, Andrei

TI The Invisible Hand and the Grabbing Hand. **AU** Frye, Timothy; Shleifer, Andrei.

TI Trust in Large Organizations. **AU** La Porta, Rafael; Lopez-de-Silanes, Florencio; Shleifer, Andrei; Vishny, Robert W.

TI Trust in Large Organizations. **AU** La Porta, Rafael; Lopez-de-Silanes, Florencio; Shleifer, Andrei; Vishny, Robert W.

TI Legal Determinants of External Finance. **AU** La Porta, Rafael; Lopez-de-Silanes, Florencio; Shleifer, Andrei; Vishny, Robert W.

TI Legal Determinants of External Finance. **AU** La Porta, Rafael; Lopez-de-Silanes, Florencio; Shleifer, Andrei; Vishny, Robert W.

Shoven, John B.

PD November 1996. **TI** The Taxation of Pensions: A Shelter Can Become A Trap. **AU** Shoven, John B.; Wise, David A. **AA** Shoven: Stanford University and National Bureau of Economic Research. Wise: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5815; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 61. **PR** \$5.00. **JE** E21, G23, H24. **KW** Pension Funds. Taxation. Savings. Estate Taxes.

AB Pensions are widely thought to be attractive tax shelters which encourage savings for retirement. They allow people to save before-tax dollars and to compound investment returns without current taxation. However, the taxation of pension assets as they are distributed in retirement or as they pass through an estate may turn the shelter into a trap, at least for large pension accumulations. Pension distributions can face marginal tax rates as high as 61.5%; pension assets passing through an estate can face virtually confiscatory marginal tax rates between 92 and 99 percent. The analysis of this paper shows the circumstances under which these extraordinarily high marginal tax rates will be encountered. The paper presents a comprehensive examination of the taxation of pensions and discusses the optimal responses of households to the incentives created by the tax system.

Shubik, Martin

TI A Stochastic Infinite-Horizon Economy with Secured Lending, or Unsecured Lending and Bankruptcy. **AU** Karatzas, Ioannis; Shubik, Martin; Sudderth, William D.

Sieg, Holger

TI Estimating Equilibrium Models of Local Jurisdictions. **AU** Epple, Dennis; Sieg, Holger.

PD March 1997. **TI** Estimating a Dynamic Model of

Household Choices in the Presence of Income Taxation. **AA** Duke University. **SR** Duke University Department of Economics Working Papers: 97/11; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 41. **PR** no charge. **JE** C30, D91, H23, H24, H31. **KW** Life-Cycle Model. Disincentive Effects. Income Taxation. Redistributive Analysis. GMM Estimation. Semiparametric Estimation.

AB The purpose of the paper is to study the incentive and distributional consequences of income taxation in a dynamic model. The framework is estimated under a set of different identifying assumptions using parametric, non-parametric, and semi-parametric techniques. Based on the estimation results, the paper simulates the model to analyze the distribution of the tax burden under alternative tax regimes.

Silvia, Louis

TI Physician Networks, Integration and Efficiency. **AU** Sacher, Seth B.; Silvia, Louis.

Sinn, Hans-Werner

PD November 1996. **TI** International Implications of German Unification. **AA** University of Munich and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5839; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** E43, F10, F31. **KW** International Finance. Germany. Unification. Interest Rates. Devaluation.

AB This paper advances the hypothesis that the EUS crisis was caused by German unification. The unification has implied a massive resource demand which parallels the U.S. resource demand following Reagan's tax reforms in the eighties. The resource demand revised the German interest rates relative to the rest of the world which brought about devaluations of other European currencies. The paper identifies those European currencies which currently are undervalued.

Siskind, Aaron

TI Assessing Bias in the Consumer Pride Index from Survey Data. **AU** Krueger, Alan B.; Siskind, Aaron.

Skinner, Jonathon

TI Taxation and Economic Growth. **AU** Engen, Eric M.; Skinner, Jonathon.

Skott, Peter

TI On the Effects of Drug Policy. **AU** Jepsen, Gunnar Thorlund; Skott, Peter.

PD September 1997. **TI** Growth and Stagnation in a Two-Sector Model: Kaldor's Mattioli Lectures. **AA** University of Aarhus. **SR** Aarhus Department of Economics Working Paper: 1997/16; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. **PG** 31. **PR** no charge. **JE** O41. **KW** Kaldor. Two-Sector Model. Growth Engine. Price Stabilization.

AB Kaldor's Mattioli lectures analyze a two-sector model with increasing returns to scale (IRS) in industry and decreasing returns (DRS) in agriculture. This review article shows that (i) with IRS in industry a long-run equilibrium

growth path with strictly positive growth rates may exist even if agriculture is subject to DRS; (ii) the industrial sector is the "engine of growth" if agricultural investment is determined passively by available saving; (iii) if one introduces a separate agricultural investment function both positive and negative agricultural supply shocks may lead to stagnation, thus vindicating Kaldor's emphasis on commodity price stabilization.

PD November 1997. **TI** Uneven Development and the Dynamics of Distortion. **AU** Skott, Peter; Sethi, Rajiv. **AA** Skott: University of Aarhus. Sethi: Columbia University. **SR** Aarhus Department of Economics Working Paper: 1997/23; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. **PG** 29. **PR** no charge. **JE** F12, F13, O19. **KW** Uneven Development. Scale Economies. Trade. Distortion. Convergence. Growth Regressions.

AB This paper develops a two-country, two-sector model of international trade with increasing returns to scale in one sector. Free trade leads to asymmetric equilibria even when both countries are identical with respect to technology, tastes and factor endowments. For some parameter values, trade leads to a uniform welfare improvement in both countries, while for others it can give rise to uneven development in the sense of persistent disparities in wages, income and welfare. In the latter case, distortionary industrial policy by the less developed country may be welfare enhancing. If the dynamics of policy changes are endogenized, the model gives rise to periodic changes in industrial leadership of leapfrogging. Implications of this phenomenon for the empirical literature on convergence are discussed.

Slaughter, Matthew J.

PD January 1997. **TI** Per Capita Income Convergence and the Role of International Trade. **AA** Dartmouth College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5897; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 10. **PR** \$5.00. **JE** F10, F43, O19, O40. **KW** International Trade. Investment. Growth. Income Convergence.

AB The recent literature on cross-country convergence of per capita income has largely ignored international trade. The reason might be perspective. Most convergence papers frame the analysis in a Solow world in which countries exist independently. But most international trade economists have a very different perspective of a world in which countries exchange goods, factors, and ideas. The goal of this paper is to sketch out some basic relationships between per capita income convergence and international trade. First, the author briefly summarizes a few interesting recent papers which have linked income convergence to trade. Their common inference is that for countries which are both somehow linked by trade and converging, trade helps cause the convergence. Second, the author critiques these papers in light of some simple accounting and trade theory. The key point here is that countries trading is not sufficient proof that trade helps cause per capita income convergence.

Slikker, Marco

PD March 1997. **TI** A One-Stage Model of Link Formation and Payoff Division. **AU** Slikker, Marco; van den

Nouweland, Anne. **AA** Slikker: CentER for Economic Research and Tilburg University. van den Nouweland: University of Oregon. **SR** Tilburg CentER for Economic Research Discussion Paper: 9723; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 37. **PR** no charge. **JE** C71, C72. **KW** Link Formation. Payoff Division.

AB In this paper we introduce a strategic form model in which cooperation structures and divisions of the payoffs are determined simultaneously. We analyze the cooperation structures and payoff divisions that result according to several equilibrium concepts. We find that essentially no cycles will result and that a player need not profit from central position in a cooperation structure.

Sloof, Randolph

TI Campaign Expenditures, Contributions and Direct Endorsements: The Strategic Use of Information and Money to Influence Voter Behavior. **AU** Potters, Jan; Sloof, Randolph; van Winden, Frans.

Small, Arthur A.

TI Bioprospecting with Prior Ecological Information. **AU** Rausser, Gordon C.; Small, Arthur A.

TI Valuing Research Leads: Bioprospecting and the Conservation of Genetic Resources. **AU** Rausser, Gordon C.; Small, Arthur A.

Smith, Peter

TI The Hiring Function Reconsidered: On Closing the Circle. **AU** Mumford, Karen; Smith, Peter.

Smith, Roy C.

PD 1997. **TI** Risks and Rewards in Emerging Market Investments. **AU** Smith, Roy C.; Walter, Ingo. **AA** New York University. **SR** New York University, Salomon Center Working Papers: S/97/14; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 23. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** F21, F34, F36, G11, O16. **KW** Capital Flows. Investment. Emerging Markets. Securities. Portfolio Choice.

AB What is evident in patterns of global capital flows is that the basic cycle of investment into emerging market loans and securities is compressed, and its amplitude accentuated, by factors related both to conditions in the emerging market countries and by fund managers' competition to attract and assets under management by demonstrating outstanding investment results. All are trying to beat their benchmarks and the vast majority fail to do so. All attempt to increase returns for the same amount of risk by shifting into new and different asset classes. Emerging market securities are thought to be good examples of high-risk/high-return investments, so portfolio managers seek to have them among their assets in modest quantities. This paper explores the dynamics of emerging market portfolio investment and considers prospects for the future from the perspective of both investors and governments.

PD November 1997. **TI** The European Securities Industry

Under a Single Currency. **AA** New York University. **SR** New York University, Salomon Center Working Papers: S/97/16; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. **PG** 55. **PR** \$5.00 each prepaid; \$100.00 yearly subscription. **JE** F33, F36, G15, G23, G24. **KW** Europe. Securities Industry. European Union.

AB This paper examines the competitive dynamics of the securities industry in Europe and seeks to identify the major sources of competitive advantage for firms participating in the European industry in the future. It compares a variety of developments to date in the European market with those that have occurred in the United States over the past fifteen years. It then attempts to assess what impact on the European securities industry the forthcoming adoption of a single European currency and Economic and Monetary Union (EMU) will have. It restricts its examination, however, to the wholesale finance sector, focusing only on matters that affect markets for debt and equity securities that are issued or traded within Europe or across its borders, and related advisory services of investment banks and securities firms. The aim is to construct the European securities industry of the future and what will be required to succeed in it.

Smith, V. Kerry

PD March 1997. **TI** Does Nature Limit Environmental Federalism? **AU** Smith, V. Kerry; Schwabe, Kurt A.; Mansfield, Carol. **AA** Smith and Mansfield: Duke University. Schwabe: Ohio University. **SR** Duke University Department of Economics Working Papers: 97/01; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 35. **PR** no charge. **JE** H11, H23, Q28. **KW** Environmental Federalism. Benefit-Cost 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 March 1997. **TI** Welfare Measurement and Representative Consumer Theory. **AU** Smith, V. Kerry; Von Haefen, Roger. **AA** Smith: Duke University and Resources for the Future. Von Haefen: Duke University. **SR** Duke University Department of Economics Working Papers: 97/07; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 8. **PR** no charge. **JE** D11, D82, Q20. **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.

TI Measuring the Private Benefits from Connections to Public Water Systems in Developing Countries: A Case Study of the Punjab, Pakistan. **AU** Altaf, Mir Anjum; Jamal, Haroon; Liu, Jin Long; Smith, V. Kerry; Whittington, Dale.

TI Measuring the Private Benefits from Connections to Public Water Systems in Developing Countries: A Case Study of the Punjab, Pakistan. **AU** Altaf, Mir Anjum; Jamal, Haroon; Liu, Jin Long; Smith, V. Kerry; Whittington, Dale.

Smulders, Sjak

TI Catching-Up and Regulation in a Two-Sector Small Open Economy. **AU** van de Klundert, Theo; Smulders, Sjak.

PD September 1997. **TI** Should Environmental Standards Be Tighter if Technological Change is Endogenous. **AA** Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9779; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 34. **PR** no charge. **JE** O41, Q28. **KW** Environmental Standard. Technological Progress. Technological Change. Endogenous Growth.

AB This paper develops a growth model in which pollution, environmental quality and accumulation of clean technologies are endogenous. It is examined how the optimal environmental policy changes if the contribution of endogenous to technological progress total productivity growth increases. Short-run pollution reduction should be larger. However, optimal emission reduction rates in the long run may be lower because endogenous technology imposes a larger burden of investment and implies a larger persistence of the adverse effects of emission reductions on productivity. Only if growth is endogenous and long-run productivity falls as a result of environmental policy, the steady state optimal level of environmental quality is higher because of endogenous technological change. Hence, this paper argues that endogenous technological change urges for early action and disfavors a wait-and-see strategy.

Soderlind, Paul

PD January 1997. **TI** New Techniques to Extract Market Expectations from Financial Instruments. **AU** Soderlind, Paul; Svensson, Lars E. O. **AA** Soderlind: Stockholm School of Economics. Svensson: Stockholm University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5877; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 47. **PR** \$5.00. **JE** E31, E43, E52, F31, G13. **KW** Asset Pricing. International Finance. Monetary Economics. Inflation. Exchange Rates.

AB This paper is a selective survey of new or recent methods to extract information about market expectations from asset prices for monetary policy purposes. Traditionally, interest rates and forward exchange rates have been used to extract expected means of future interest rates, exchange rates and inflation. More recently, these methods have been refined to rely on implied forward interest rates, so as to extract expected future time-paths. Very recently, methods have been designed to extract not only the means but the whole (risk neutral)

probability distributions from a set of option prices.

Sonnemans, Joep

TI What's Causing Overreaction? An Experimental Investigation of Recency and the Hot Hand Effect. **AU** Offerman, Theo; Sonnemans, Joep.

Sorensen, Jan Rose

PD May 1997. **TI** Do Trade Unions Actually Worsen Economic Performance? **AA** University of Aarhus. **SR** Aarhus Department of Economics Working Paper: 1997/06; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eeo.aau.dk/afn. **PG** 23. **PR** no charge. **JE** E24, J51, O41. **KW** Unemployment. Growth. Trade Unions.

AB The answer to the question in the title, of course, depends on how we define economic performance. In an overlapping generations model we show that trade unions do worsen economic performance in the sense that we get unemployment, but it is quite likely that trade unions give rise to a higher growth rate than what would have been the case if the labor market were competitive. Therefore, in general the welfare implications of trade unions are ambiguous. One surprising result is that trade unions give rise to an unambiguous decrease in welfare if bargaining is over all variables affecting the bargaining parties (i.e. "efficient bargaining"), whereas welfare may increase if bargaining is only over a subset of the variables affecting the bargaining parties (e.g. training and wage).

Stancanelli, Elena G. F.

TI Individual Wealth, Reservation Wages and Transitions Into Employment. **AU** Bloemen, Hans G.; Stancanelli, Elena G. F.

PD September 1997. **TI** Do the Rich Stay Unemployed Longer? An Empirical Study for the UK. **AA** Tilburg University and Aarhus University. **SR** Tilburg Center for Economic Research Discussion Paper: 9781; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 25. **PR** no charge. **JE** C41, J64. **KW** Duration Analysis. Unemployment Duration.

AB This paper investigates the impact of individual asset holdings on the probability of leaving unemployment. According to the theory, higher levels of financial wealth will result in higher reservation wages and longer unemployment durations. I estimate the impact of beginning of period financial assets on the hazard rate, using data drawn from a UK inflow sample of the unemployed. The empirical findings indicate that individual asset holdings affect significantly the escape rate out of unemployment. In particular, negative levels of wealth increase significantly the hazard of leaving unemployment while positive levels of wealth reduce significantly the probability of leaving unemployment.

Stapleton, Richard C.

TI The Pricing of Marked-To-Market Contingent Claims in a No-Arbitrage Economy. **AU** Satchell, Stephen E.; Stapleton, Richard C.; Subrahmanyam, Marti G.

Steedman, Hilary

PD August 1996. **TI** Measuring the Quality of Educational Outputs: A Note. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 302; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 25. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** I21. **KW** International. Comparisons. Education. Training.

AB This paper contrasts the approach to the measurement of stocks of education that is adopted by growth economists on the one hand and governments wishing to improve economic performance through education on the other. It is pointed out that progress to date in demonstrating the link between human capital investment and economic growth for a range of countries world-wide has been disappointing. It is suggested that more precise measurement methods in compiling the datasets used by growth economists might contribute to research in this area. In the same way, the needs of governments monitoring the performance of their own country against those of others require a reformulated approach. To meet the needs of the latter group, data on educational qualifications will need to be collected in a more consistent manner in the different countries and adjustments made to take into account different types of certification. Inconsistencies in the current methods probably lead to a group of countries in which real outputs are understated. A more rigorous and tightly-defined taxonomy should be developed in succession to the ISCED to form the framework for qualitative comparisons. Decisions about the allocation of qualifications to a revised framework should be based on agreed measures of quality.

PD July 1997. **TI** Recent Trends in Engineering and Construction Skill Formation -- UK and Germany Compared. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 353; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 26. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** J24, J31, L74. **KW** Engineering. Construction. Skill Formation.

AB Accurate accounting for annual flows of vocational qualifications by sector of economic activity has been greatly impeded by the data collection methods put in place since the setting up of the National Council for Vocational Qualifications (NCVQ) in 1986. Using unpublished data from a variety of sources, the paper concludes that, allowing for differences in the size of the engineering and construction sectors in the two countries, Britain continues to lag well behind Germany in the production of intermediate level engineering skills and in craft qualifications in the building trades. Assessments of the relative quality of the NVQ Level 2 in Construction and the German construction apprenticeship show the standard of practical competence acquired to be similar in both countries. The standard of the German tests of technical knowledge and of mathematics was judged to be well above the building trades craft level in Britain. Unlike their German counterparts, British construction and engineering trainees awarded NVQ 2 and NVQ 3 qualifications are no longer obliged to pass externally set and marked tests in occupationally-related technical skill and knowledge and in mathematics. It appears that Britain is

still some way from closing the skills gap with Germany in engineering and in the building trades despite sacrificing rigor in assessment and the breadth and technical knowledge base of traditional skills training programs and concentrating instead on work-related practical competencies.

Steel, Mark F. J.

TI On the Dangers of Modelling Through Continuous Distributions: A Bayesian Perspective. **AU** Fernandez, Carmen; Steel, Mark F. J.

TI Multivariate Student-T Regression Models: Pitfalls and Inference. **AU** Fernandez, Carmen; Steel, Mark F. J.

TI A Stochastic Frontier Analysis of Output Level and Growth in Poland and Western Economies. **AU** Osiewalski, Jacek; Koop, Gary; Steel, Mark F. J.

Stevens, Guy V. G.

PD August 1997. **TI** On the Inverse of the Covariance Matrix in Portfolio Analysis. **AA** Board of Governors of the Federal Reserve Systems. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 587; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us. **PG** 20. **PR** no charge. **JE** G11. **KW** Portfolio Analysis. Covariance Matrix. Inverse Matrix.

AB The goal of this study is the derivation and application of a direct characterization of the inverse of the covariance matrix central to portfolio analysis. As argued below, such a specification, in terms of a few primitive constructs, provides new and illuminating expressions for such key concepts as the optimal holding of a given risky asset and the slope of the risk-return efficiency locus faced by the individual investor. The building blocks of the inverse turn out to be the regression coefficients and residual variance obtained by regressing the asset's excess return on the set of excess returns for all other risky assets.

Stolyarov, Dmitriy

TI Learning, Complementarities, and Asynchronous Use of Technology. **AU** Jovanovic, Boyan; Stolyarov, Dmitriy.

Stulz, Rene M.

TI The Underreaction Hypothesis and the New Issue Puzzle: Evidence from Japan. **AU** Kang, Jun-Koo; Stulz, Rene M.; Kim, Yong-Cheol.

Subrahmanyam, Marti G.

TI The Pricing of Marked-To-Market Contingent Claims in a No-Arbitrage Economy. **AU** Satchell, Stephen E.; Stapleton, Richard C.; Subrahmanyam, Marti G.

Sudderth, William D.

TI A Stochastic Infinite-Horizon Economy with Secured Lending, or Unsecured Lending and Bankruptcy. **AU** Karatzas, Ioannis; Shubik, Martin; Sudderth, William D.

Sundaram, Rangarajan K.

TI Auction Theory: A Summary with Applications to Treasury Markets. **AU** Das, Sanjiv Ranjan; Sundaram, Rangarajan K.

Sustersic, Janez

PD November 1996. **TI** Why Do People Support Dictators? (Popularity versus Political Exchange). **AU** Sustersic, Janez; Schnytzer, Adi. **AA** Sustersic: University of Ljubljana. Schnytzer: Bar Ilan University. **SR** University of Western Ontario Papers in Political Economy: 78; Department of Economics, Social Science Center, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.ssc.uwo.ca/economics. **PG** 24. **PR** no charge. **JE** D71, D72, P40. **KW** Dictatorship. Political Exchange.

AB This paper investigates empirically the factors of public support for the leadership in non-democratic countries. The authors assume that the number of the Communist Party members was an indicator of public support for the former socialist regimes and perform a time series analysis for the six Yugoslav republics in the 1953-1988 period. They find that rents distributed to the population were far more important than the popularity of economic policies and perhaps even more important than repression. In the authors' view, these findings provide strong empirical support for economic models of dictatorship based on the notion of political exchange.

Svensson, Lars E. O.

TI New Techniques to Extract Market Expectations from Financial Instruments. **AU** Soderlind, Paul; Svensson, Lars E. O.

Symons, James

TI Attainment in Secondary School. **AU** Feinstein, Leon; Symons, James.

Tammel, B.

TI Applications of P-Median Techniques to Facilities Design Problems: An Improved Heuristic. **AU** Ashayeri, J.; Heuts, R.; Tammel, B.

Tauchen, George

TI Reprojecting Partially Observed Systems with Application to Interest Rate Diffusions. **AU** Gallant, A. Ronald; Tauchen, George.

PD March 1997. **TI** The Objective Function of Simulation Estimators Near the Boundary of the Unstable Region of the Parameter Space. **AA** Duke University. **SR** Duke University Department of Economics Working Papers: 97/14; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 23. **PR** no charge. **JE** C13, C15. **KW** Method of Moments. Dynamic Stability. Nonstationarity. Unit Root. Nonergodic.

AB The paper examines the role of stability constraints in estimation by dynamic simulation. In particular, it analyzes the behavior of the objective function on either side of the boundary of the stability region of the parameter space. The main finding is that stability constraints may be ignored because the simulation-based objective function contains a built-in penalty to enforce stability. A key caveat, however, is that the dynamic stability of the auxiliary model that defines the moment conditions must be checked and enforced. An attempt to fit via simulation to moments defined by a dynamically unstable auxiliary model can be expected to lead to an ill-behaved objective function.

Taylor, M. Scott

TI A Simple Model of Trade, Capital Mobility, and the Environment. **AU** Copeland, Brian R.; Taylor, M. Scott.

ten Raa, Thijs

PD March 1997. **TI** Club Efficiency and Lindahl Equilibrium. **AA** Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9724; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 14. **PR** no charge. **JE** D71, H41, R51. **KW** Club Efficiency. Lindahl Equilibrium.

AB Club efficient allocations are the ones that remain in the core of a replicated economy. Schweizer's price support theorem unifies not only the welfare and core limit theorems for private good economics, and the Henry George Theorem for economies with fixed public goods, but also encompasses Vasil'ev's core limit theorem for economies with congested public goods. This is shown by appropriate choice of aggregation rule defining local public goods and by proof of a theorem according to which club efficiency implies Lindahl equilibrium.

TI Increasing Returns and Perfect Competition: The Role of the Land. **AU** Berliant, Marcus; ten Raa, Thijs.

ter Horst, Jenke

PD March 1997. **TI** Estimating Short-Run Persistence in Mutual Fund Performance. **AU** ter Horst, Jenke; Verbeek, Mamo. **AA** ter Horst: Tilburg University. Verbeek: K. U. Leuven and Tilburg University. **SR** Tilburg Center for Economic Research Discussion Paper: 9721; Center for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 30. **PR** no charge. **JE** C20, G11, G23. **KW** Mutual Funds. Performance. Estimation Biases. Hot Hands.

AB The purpose of this paper is two-fold. First, we analyze the properties of a number of estimators that can be used to estimate short-run persistence in mutual fund returns. When data for different funds are pooled, it is advisable to correct for cross-sectional differences in exposed returns. However, these adjustments may induce biases in the estimated persistence coefficients and thus lead to spurious persistence. Theoretical derivations, combined with a Monte Carlo study, show that the importance of these biases cannot be neglected for the samples that are typically used in applied work, in particular if the number of time periods is small. Second, we estimate the short-run persistence in two samples of U.S. open-end mutual funds using quarterly returns for 1986-1994. The subsample of growth funds appears to have a persistence pattern that is quite similar to the one found by Hendricks, Patel and Zeckhauser (1993) for the period 1974-1988. In general, the results are quite sensitive to the estimation method that is employed.

Thaler, Richard H.

TI Probabilistic Insurance. **AU** Wakker, Peter P.; Thaler, Richard H.; Tversky, Amos.

Thierry, Paul

TI Unemployment and the Labor Management Conspiracy. **AU** Karp, Larry; Thierry, Paul.

Thomas, Jonathan P.

TI Informal Insurance Arrangements in Village Economies.
AU Ligon, Ethan; Thomas, Jonathan P.; Worrall, Tim.

Tijs, Stef

TI The Consistency Principle for Set-Valued Solutions and a New Direction for the Theory of Equilibrium Refinements.
AU Dufwenberg, Martin; Norde, Henk; Reijnen, Hans; Tijs, Stef.

Timmer, Ashley S.

PD December 1996. **TI** Racism, Xenophobia or Markets? The Political Economy of Immigration Policy Prior to the Thirties. **AU** Timmer, Ashley S.; Williamson, Jeffrey G. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5867; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 35. **PR** \$5.00. **JE** F13, F22, N30, O15, P16. **KW** Labor Studies. American Economy. Immigration.

AB Contrary to conventional wisdom, the doors did not suddenly slam shut on American immigrants when Congress passed the Emergency Quota Act of May 1921. Rather, the United States started imposing restrictions a half century earlier. Argentina, Australia, Brazil, and Canada enacted similar measures, although the anti-immigration policy drift often took the form of an enormous drop in large immigrant subsidies. Contrary to conventional wisdom, there wasn't simply one big regime switch around World War I. What explains immigration policy between 1860-1930? This paper identifies the fundamentals that underlay the formation of immigration policy, distinguishes between the impact of these long run fundamentals and short run timing, and clarifies the difference between market and non-market forces. The key bottom line is this: Over the long haul, immigrant countries tried to maintain the relative economic position of unskilled labor, compared with skilled labor, landowner and industrialist.

Timmermans, H.

TI Investigating Consumers' Tendency to Combine Multiple Shopping Purposes and Destinations. **AU** Dellaert, B. G. C.; Arentze, Bierlaire, M. T.; Borgers, A.; Timmermans, H.

Tirole, Jean

TI Private and Public Supply of Liquidity.
AU Holmstrom, Bengt; Tirole, Jean.

Tobias, Justin

PD February 1998. **TI** Further Results on Bayesian Method of Moments Analysis of the Multiple Regression Model. **AU** Tobias, Justin; Zellner, Arnold. **AA** Tobias: University of Chicago. Zellner: University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 833; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 36. **PR** \$9.00 Domestic; \$18.00 International Surface Rate; not available after publication. **JE** C11. **KW** Bayesian Method. Econometric Models. BMOM.

AB The Bayesian Method of Moments (BMOM) was

introduced in 1994 to permit investigators to make inverse probability statements regarding parameters' possible values given the data when the form of the likelihood function is unknown. BMOM has been applied in analyses of several statistical and econometric models including location, multiple and multivariate regression, and simultaneous equation models. In Zellner (1996) and Zellner and Sacks (1996) some previous BMOM analyses of the multiple regression model have appeared that permit derivation of post-data densities for parameters and future observations to be calculated without use of a likelihood function, prior density, or Bayes' Theorem. In the present paper, we extend previous analyses by showing how information about a variance parameter and its relation to regression coefficients affects post-data densities. We also discuss estimation of functions of parameters and model selection techniques using BMOM and traditional Bayesian approaches. The developed theory is then applied using a model and data from a famous paper by Haavelmo (1974).

TI Bayesian Method of Moments (BMOM) Analysis of Parametric and Semiparametric Regression Models.
AU Zellner, Arnold; Tobias, Justin; Ryu, Hang K.

Tobin, James

PD July 1997. **TI** The Experiment in Applied Econometrics. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1159; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 9. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** C20. **KW** Demand Functions. Time Series.

AB The Experiment in Applied Econometrics was sponsored by the Center for Economic Research of Tilburg University, the Netherlands. It was conceived and directed by Jan Magnus of Tilburg and Mary Morgan of the London School of Economics. They invited individuals or teams to participate. They designated a particular old article applying econometrics to an empirical problem. Each participant was to analyze the same data sets as the original article, both those then available and the same data extended to include subsequent observations. The participants were free to use their own economic specifications and econometric techniques. Eight participants submitted results, and they reported them at a workshop at Tilburg in December 1996. The designated article was the author's "A Statistical Demand Function for Food in the USA," *Journal of the Royal Statistical Society* 1950. The author was invited to the workshop, and these are his remarks at the concluding session.

Tommasi, Mariano

TI When Does it Take a Nixon to Go to China?
AU Cukierman, Alex; Tommasi, Mariano.

Tryon, Ralph W.

TI A Guide to FRB/Global. **AU** Levin, Andrew T.; Rogers, John H.; Tryon, Ralph W.

Tversky, Amos

TI Probabilistic Insurance. **AU** Wakker, Peter P.; Thaler, Richard H.; Tversky, Amos.

Uhlig, Harald

PD December 1996. **TI** Capital Income Taxation and the

Sustainability of Permanent Primary Deficits. **AA** Center for Economic Policy Research, CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9711; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 38. **PR** no charge. **JE** H20, H62. **KW** Tax. Capital Income. Permanent Deficits.

AB If a government imposes a tax on capital income, it may, as a result, lower the private rate of return on capital below the growth rate of an economy, thereby giving rise to the possibility of running a permanent deficit. Since, however, the before-tax rate of return and not the after-tax rate of return is relevant for judging the dynamical efficiency of the economy, the possibility of a permanent deficit does not itself imply a possibility for a Pareto-improving redistribution of income. To examine this issue step by step, we examine in general whether a government can run a deficit forever by rolling over its debt. Assuming the government to run a deficit in each period equal to a constant fraction of total output, we study several overlapping generations models, proceeding from endowment economies to neoclassical growth with a variable capital stock. We then introduce capital income taxation and show, for example, that permanent deficits are feasible in the case of a variable capital stock, provided the capital income tax is sufficiently high. We examine the welfare effects and discuss policy consequences.

PD February 1997. **TI** Long Term and the Political Support for a Monetary Union. **AA** Center for Economic Policy Research, CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9713; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 32. **PR** no charge. **JE** F15, H63. **KW** Long-term Debt. Monetary Union.

AB This paper examines the role of long term debt for the political support of a monetary union or, more generally, an inflation-reduction policy. The central idea is that the decision about membership in the union leads to a redistribution between debtors and creditors, if they are holding long term debt with a nominally fixed interest rate, as well as tax payers. For example, if joining the union means a decrease in the inflation rate, creditors should favor joining while debtors should be against it. A government of a high inflation country might strategically try to exploit this effect by selling more long term debt denominated in its own currency at a fixed nominal rate rather than a foreign currency such as the Dollar to its citizens. We show that the effect on political support is unclear. While the 'creditor effect' of increasing the number of agents holding domestically denominated debt helps generating support for joining the union, the 'tax effect' of having to raise more taxes in order to pay for the increased real debt payments after a successful monetary union works in the opposite way. The paper then studies a number of special cases and ramifications.

TI Growth and the Cycle: Creative Destruction Versus Entrenchment. **AU** Canton, Erik; Uhlig, Harald.

TI On Adjusting the HP-Filter for the Frequency of Observations. **AU** Ravn, Morton O.; Uhlig, Harald.

TI An Analysis of the "Stability Pact". **AU** Beetsma, Roel M. W. J.; Uhlig, Harald.

TI Preferences, Consumption Smoothing, and Risk Premia. **AU** Lettau, Martin; Uhlig, Harald.

van Aarle, B.

TI The (In)Finite Horizon Open-Loop Nash LQ Game: An Application to EMU. **AU** Engwerda, Jacob C.; van Aarle, B.; Plasmans, J. E. J.

van Damme, Eric

TI Moral Hazard and Private Monitoring. **AU** Bhaskar, V.; van Damme, Eric.

van de Klundert, Theo

PD June 1997. **TI** Catching-Up and Regulation in a Two-Sector Small Open Economy. **AU** van de Klundert, Theo; Smulders, Sjak. **AA** CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9751; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 31. **PR** no charge. **JE** F43, O41, L51. **KW** Catching-Up. Regulation. Convergence. Productivity Growth. Small Open Economy. Capital Mobility.

AB Emerging economies may grow fast because there is a potential for catching-up. In this paper foreign knowledge spillovers raise productivity of R&D in the exposed sector. The higher the productivity gap the more profitable investment in R&D will be. As a result labor productivity in the production department of the exposed sector rises fast. The sheltered sector realizes no productivity increases but gains because the terms of trade rise in favor of non-tradables. In the long run the rate of growth of the economy converges to the exogenous world rate. Capital mobility speeds up the process of convergence at the expense of accumulating foreign debt. Moreover, temporary shocks have long lasting effects as the economy exhibits hysteresis in case of perfect capital mobility. Regulation in the sheltered sector induces mark-up pricing and a decline in the demand for non-tradables. The market for tradable expands and it becomes more profitable to invest in R&D. Regulation of this kind as is often practiced in developing countries thus enhances economic growth. Again the results differ whether or not capital mobility is assumed. Maintaining equilibrium on the balance of trade leads to a higher long-run aggregate consumption level, which may explain the often observed reluctance to introduce free international capital mobility.

van den Nouweland, Anne

TI A One-Stage Model of Link Formation and Payoff Division. **AU** Slikker, Marco; van den Nouweland, Anne.

van der Genugten, Ben

PD June 1997. **TI** Canonical Partitions in the Restricted Linear Model. **AA** Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9767; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 12. **PR** no charge. **JE** C12, C13, C90. **KW** Restricted Linear Model. Canonical Partition.

Identification. Testing. Estimation. Experimental Design.

AB Not available.

van der Laan, Erwin

TI How Larger Demand Variability May Lead to Lower Costs in the Newsvendor Problem. **AU** Ridder, Ad; van der Laan, Erwin; Salomon, Marc.

Van Huyck, John

TI Risk Dominance, Payoff Dominance and Probabilistic Choice Learning. **AU** Battalio, Raymond; Samuelson, Larry; Van Huyck, John.

van Shaik, Anton B. T. M.

PD June 1997. **TI** Productivity and Unemployment in a Two-Country Model with Endogenous Growth. **AU** van Shaik, Anton B. T. M.; de Groot, Henri L. F. **AA** CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9753; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: ewis.kub.nl/few5/center/center.htm. **PG** 39. **PR** no charge. **JE** F43, J64, O41. **KW** International Trade. Endogenous Growth. Unemployment. Efficiency Wages. Managerial Fixed Costs. Relative Productivity.

AB Relative to the United States, most European countries have high rates of unemployment and low levels of productivity in manufacturing. To relate these issues, we develop a leader-follower model with endogenous growth and dual labor markets, stressing the role of high-tech and high-wage sectors in trade between countries. The model shows a negative relation between unemployment and growth. The steady state relative productivity level and the corresponding rates of unemployment depend on the relative level of fixed costs in the high-tech sectors of both countries. Downsizing of firms in the leader country raises the worldwide rate of unemployment, whereas downsizing of firms in the follower country enlarges the productivity trap.

van Soest, Arthur

TI An Analysis of Housing Expenditure Using Semiparametric Models and Panel Data. **AU** Charlier, E.; Melenberg, Bertrand; van Soest, Arthur.

TI An Analysis of Housing Expenditure Using Semiparametric Cross-Section Models. **AU** Charlier, E.; Melenberg, Bertrand; van Soest, Arthur.

TI Testing the Predictive Value of Subjective Labor Supply Data. **AU** Euwals, Rob; Melenberg, Bertrand; van Soest, Arthur.

TI Comparing Predictions and Outcomes: Theory and Application to Income Changes. **AU** Das, Marcel; Dominitz, Jeff; van Soest, Arthur.

TI Subjective Measures of Household Preferences and Financial Decisions. **AU** Donkers, Bas; van Soest, Arthur.

van Winden, Frans

TI Campaign Expenditures, Contributions and Direct Endorsements: The Strategic Use of Information and Money to Influence Voter Behavior. **AU** Potters, Jan; Sloof, Randolph; van Winden, Frans.

Van't Veld, Klaus

PD July 1997. **TI** The Judgement Proof Opportunity. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 823; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 35. **PR** \$8.75 Domestic; \$17.50 International Surface Rate; not available after publication. **JE** K10. **KW** Judgement Proof. Liability.

AB The model developed in this paper generalizes existing models of the judgement proof problem in two major respects. First, it takes full account of the firm's optimal financial decisions in the face of liability and the way in which, given these decisions, the capital market places a value on its shares. Second, it takes full account of how industry structure might change in response to liability, allowing for arbitrary scale economies in either production or accident prevention.

Vannetelbosch, Vincent J.

TI Retirements of Rationalizability for Normal-Form Games. **AU** Herings, Jean-Jacques P.; Vannetelbosch, Vincent J.

Vega, Juan Luis

TI Spanish Unemployment and Inflation Persistence: Are There Phillips Trade-Offs? **AU** Dolado, Juan J.; Lopez-Salido, J. David; Vega, Juan Luis.

Velasco, Andres

PD November 1996. **TI** When are Fixed Exchange Rates Really Fixed? **AA** New York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5842; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** \$5.00. **JE** E52, F31, H63, O23. **KW** International Finance. Exchange Rates. Devaluation.

AB This paper analyzes the sustainability of fixed exchange rates by extending the Barro-Gordon framework to a fully dynamic context in which the level of a state variable (in this case debt) determines the payoffs available to the government at each point in time. The model yields the following results. If debt is sufficiently low, there is an equilibrium in which the government does not devalue. For an intermediate range of debt levels, the government devalues in response to an attack but not otherwise, so that self-fulfilling attacks can occur. Finally, for yet another debt range there can also be sunspot equilibria in which an attack (and the corresponding devaluation) occurs with positive probability.

Velilla, Pilar

TI La Dinamica de los Margenes en Espana. **AU** Salido-Lopez, David J.; Velilla, Pilar.

Venables, Anthony

PD July 1997. **TI** Trade Liberalization and Factor Mobility: An Overview. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 352; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England.

Website: cep.lse.ac.uk. PG 38. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE F10, F20. KW Factor Mobility. Trade Barriers.

AB This paper analyzes the ways in which liberalization of goods trade may change factor prices and the incentives for factor mobility. While trade liberalization reduces the incentives for factor mobility in a Heckscher-Ohlin model, it may increase it in a specific factors model (in which there is a richer range of substitution/complementarity relationships between factors of production) and in models in which there are increasing returns to scale.

Verbeek, Marno

TI Estimating Short-Run Persistence in Mutual Fund Performance. AU ter Horst, Jenke; Verbeek, Marno.

Verhagen, Willem H.

TI The Advantage of Hiding Both Hands: Foreign Exchange Intervention, Ambiguity and Private Information. AU Eijffinger, Sylvester C. W.; Verhagen, Willem H.

Verkooijen, William

TI Application of Neural Networks to House Pricing and Bond Rating. AU Daniels, Hennie; Kamp, Bart; Verkooijen, William.

Vettas, Nikolaos

PD July 1997. TI Location and Product Quality. AA Duke University. SR Duke University Department of Economics Working Papers: 97/29; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. PG 33. PR no charge. JE D43, L13, L15. KW Quality. Variety. Location. Signaling.

AB The authors examine a horizontal product differentiation duopoly model where firms are also differentiated with respect to the quality of their products. Firms first choose their locations and then compete in prices. It is shown that, whereas the low quality firm prefers to locate as far as possible from its competitor, the same is not true for the high quality firm, unless the quality difference is small enough. In addition, the paper suggests an explanation for spatial agglomeration based on incomplete information considerations. Because it is less costly for a high quality firm to locate close to another firm, choosing a location close to an existing firm signals high quality.

Viceira, Luis M.

TI Consumption and Portfolio Decisions When Expected Returns are Time Varying. AU Campbell, John Y.; Viceira, Luis M.

Vigdor, Jacob L.

TI The Rise and Decline of the American Ghetto. AU Cutler, David M.; Glaeser, Edward L.; Vigdor, Jacob L.

Vinals, Jose

PD August 1997. TI El Mercado de Trabajo Espanol y la Union Economica y Monetaria Europea. AU Vinals, Jose; Jimeno, Juan F. AA Vinals: Banco de Espana; Jimeno: Universidad de Alcala. SR Banco de Espana. Servicio de Estudios. Documento de Trabajo: 9717; Banco de Espana. Seccion de Publicaciones. Negociado de Distribucion y Gestion. Alcala 50. 28104 Madrid. Website: www.bde.es.

PG 20. PR Pta 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. JE F20, J23. KW Monetary Union. Labor Market. Unemployment.

AB This paper analyzes the situation of the Spanish labor market, in particular those aspects that may affect the benefits of the Spanish integration in the Economic and Monetary Union (EMU). The analysis begins by describing the main differences between some indicators of the behavior of the Spanish and European Union labor markets. Next, the main causes that explain that the Spanish unemployment rate is approximately double that of the average unemployment rate in the European Union, and the institutional aspects of the Spanish labor market behind these causes, are identified. Finally the possible impact of EMU on Spanish unemployment, in the short and long run, is analyzed in the light of the previous evidence.

Von Haefen, Roger

TI Welfare Measurement and Representative Consumer Theory. AU Smith, V. Kerry; Von Haefen, Roger.

Wachtel, Paul

TI Towards Market-Oriented Banking in the Economics in Transition. AU Bonin, John; Wachtel, Paul.

Wadsworth, Jonathan

TI Mind the Gap, Please? The Changing Nature of Entry Jobs in Britain. AU Gregg, Paul; Wadsworth, Jonathan.

Wakker, Peter P.

PD April 1997. TI Probabilistic Insurance. AU Wakker, Peter P.; Thaler, Richard H.; Tversky, Amos. AA Wakker: CentER for Economic Research, Tilburg University and Leiden University. Thaler: University of Chicago and National Bureau of Economic Research. Tversky: Stanford University. SR Tilburg Center for Economic Research Discussion Paper: 9735; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 31. PR no charge. JE D81. KW Probabilistic Insurance. Decision Weights. Prospect Theory.

AB Probabilistic insurance is an insurance policy involving a small probability that the consumer will not be reimbursed. Survey data suggest that people dislike probabilistic insurance and demand more than a 20% reduction in the premium to compensate for a 1% default risk. While these preferences are intuitively appealing they are difficult to reconcile with expected utility theory. Under highly plausible assumptions about the utility function, willingness to pay for probabilistic insurance should be very close to willingness to pay for full insurance less the default risk. However, the reluctance to buy probabilistic insurance is predicted by the weighting function of prospect theory. This finding highlights the potential role of the weighting function to explain insurance.

TI Choquet Integrals with Respect to Non-Monotonic Set Functions. AU De Waegenacre, Anja; Wakker, Peter P.

Walter, Ingo

TI Risks and Rewards in Emerging Market Investments. AU Smith, Roy C.; Walter, Ingo.

PD 1997. TI The Asset Management Industry in Europe:

Competitive Structure and Performance Under EMU. AA New York University and INSEAD. SR New York University, Salomon Center Working Papers: S/97/15; New York University Salomon Brothers Center for the Study of Financial Institution, Stern School of Business, 44 West 4th Street, Suite 9-160, New York, NY 10012-1126. PG 100. PR \$5.00 each prepaid; \$100.00 yearly subscription. JE F15, F33, F36, G23. KW Europe. Asset Management. Mutual Funds.

AB This paper begins with a schematic of asset management in a flow-of-funds context, identifying the types of asset-management functions that are performed and how they are linked into the financial system. It then assesses in some detail the three principal sectors of the asset management industry -- mutual funds, pension funds, and private clients, as well as foundations, endowments, central bank reserves and other large financial pools requiring institutional asset management services. In each case, the European experience is compared with that of the United States as well as, where appropriate, Japan and certain emerging-market countries. This is followed by a discussion of the competitive structure, conduct and performance of the asset management industry. Finally, the European dimensions of the issue are brought together in an impact-assessment with respect to the evolution of the European capital market, including the implications of a single currency.

Webb, Steven

TI Central Bank Autonomy and Exchange Rate Regimes -- Their Effects on Monetary Accommodation and Activism. AU Cukierman, Alex; Rodriguez, Pedro; Webb, Steven.

Weber, Bruce W.

TI Restructuring Institutional Block Trading: An Overview of the OptiMark System. AU Clemons, Erik K.; Weber, Bruce W.

Weil, David N.

TI Appropriate Technology and Growth. AU Basu, Susanto; Weil, David N.

Weinstein, David E.

TI The Myth of the Patient Japanese: Corporate Myopia and Financial Distress in Japan and the US. AU Hall, Brian J.; Weinstein, David E.

Weintraub, E. Roy

PD August 1997. TI Why So Many Italian Economists? AA Duke University. SR Duke University Department of Economics Working Papers: 97/15; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. PG 5. PR no charge. JE A14, B20. KW Italian Economists. Italy.

AB There appears to be an overrepresentation of Italian contributions to the development of modern economics. In this paper, the author offers some speculations concerning the validity of this observation, and offers some interpretations of the "evidence."

Weintrop, Joseph

TI The Valuation of the Foreign Income of US Multinational Firms: A Growth Opportunities Perspective. AU Bodnar, Gordon M.; Weintrop, Joseph.

Werker, Bas J. M.

TI Exchange Rate Target Zones: A New Approach. AU De Jong, Frank; Drost, Feike C.; Werker, Bas J. M.

Werner, J.

TI Incomplete Derivative Markets and Portfolio Insurance. AU Aliprantis, C. D.; Brown, Donald J.; Werner, J.

Wes, Marina

PD July 1996. TI Intra-Industry Trade, Firm Mobility and the Union Bargaining Game. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 300; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 31. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE F12, F15, J50. KW International Trade. Economic Integration. Imperfect Competition. Labor Unions.

AB This paper considers the impact of economic integration on wages and employment in a second-best world where countries are identical in all respects. It is first shown that international trade increases the competitive pressures on firms and thus reduces price cost markups. As product market imperfections diminish, it is demonstrated that in the presence of unions, employment unambiguously rises whereas wages may either rise or fall. If firms are internationally mobile, the threat of firm mobility increases wage pressure, thereby reducing both wages and unemployment. Although net efficiency gains result, the distribution of these gains will be uneven.

PD July 1996. TI Gains From Trade: The Holdup Problem. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 301; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 37. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE F12, F15, F20, L10. KW Imperfect Competition. International Trade. Holdup Problem.

AB In the presence of product market imperfections and holdup, this paper identifies efficiency gains resulting from international trade and economic integration. In a closed economy, a bilateral monopoly is operating and inefficiencies arise in both the input and output markets. As the economy opens up to trade, procompetitive effects in the product market suppress the margin between prices and marginal costs increasing efficiency. If downstream firms become internationally mobile, productive gains may arise from increasing returns to scale and intensified competition in the input market. The paper concludes with a discussion of the distribution of the welfare gains.

Whang, Yoon-Jae

PD October 1997. TI The Asymptotic Distribution of Nonparametric Estimates of the Lyapunov Exponent for Stochastic Time Series. AU Whang, Yoon-Jae; Linton, Oliver. AA Yale University. SR Yale Cowles Foundation Discussion Paper: 1130R; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. PG 47. PR no charge up to 3 papers; \$3.00 domestic; 4.00

International. **JE** C13, C14, C22. **KW** Chaos. Kernel. Nonlinear Dynamics. Nonparametric Regression. Semiparametric.

AB This paper derives the asymptotic distribution of a smoothing-based estimator of the Lyapunov exponent for a stochastic time series under two general scenarios. In the first case, the authors are able to establish root-T consistency and asymptotic normality, while in the second case, which is more relevant for chaotic processes, they are only able to establish asymptotic normality at a slower rate of convergence. Consistent confidence intervals are provided for both cases. The authors apply their procedures to simulated data and to exchange rate data.

White, Lawrence J.

TI De Novo Banks and Lending to Small Businesses: An Empirical Analysis. **AU** Goldberg, Lawrence G.; White, Lawrence J.

Whiteman, Charles H.

TI General-To-Specific Procedures for Fitting a Data-Admissible, Theory-Inspired, Congruent, Parsimonious, Encompassing, Weakly-Exogenous, Identified, Structural Model to the DGP: A Translation and Critique. **AU** Faust, Jon; Whiteman, Charles H.

Willer, Dirk

PD April 1997. **TI** Corporate Governance and Shareholder Rights in Russia. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 343; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 38. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** G30, K40, O16. **KW** Corporate Governance. Transition Economics. Shareholder Rights.

AB In an environment where shareholder rights cannot be enforced, management might choose to honor these rights out of self interest. This paper presents evidence from a sample of the 140 largest Russian joint stock companies, of which only a minority of firms do honor shareholder rights. These firms tend to have higher valuations on the equity market. On the other hand, the introduction of shareholder rights reduces the possibilities for management to steal. This paper develops a simple model and gives some empirical evidence on which firms are likely to choose to honor shareholder rights. In particular, I find that larger firms are more likely to honor shareholder rights, possibly because the expected value of stealing profits is smaller as the likelihood of punishment in the case of detection is higher. Furthermore, there is some evidence that large outside blockholders, as well as the state in its role as shareholder, are able to press for shareholder rights.

Williamson, Jeffrey G.

TI Racism, Xenophobia or Markets? The Political Economy of Immigration Policy Prior to the Thirties. **AU** Timmer, Ashley S.; Williamson, Jeffrey G.

Wilson, Bart J.

PD June 1998. **TI** Price Movements Over the Business Cycle in US Manufacturing Industries. **AU** Wilson, Bart J.; Reynolds, Stanley S. **AA** Wilson: Federal Trade

Commission. Reynolds: University of Arizona. **SR** Federal Trade Commission Bureau of Economics Working Paper: 219; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave., NW, Room 3110, Washington, D.C. 20580. Website: bperson@ftc.gov. **PG** 54. **PR** no charge. **JE** D43, E32, L13, L16. **KW** Countercyclical Markups. Oligopoly Pricing. Switching Regime Filter.

AB This paper develops and tests implications of an oligopoly pricing model. The model involves capacity investments that are made before demand is revealed and pricing decisions that are made after demand is known. The model predicts that during a demand expansion the short run competitive price is a pure strategy Nash equilibrium, but in a recession firms set prices above the competitive price. Thus, price markups over the competitive price are countercyclical. Prices set during a recession are more variable than prices set during expansionary periods, because firms used mixed strategies in recessions. The empirical analysis utilizes a time series switching regime filter to test the unique predictions of the model, namely that (1) price changes are more variable in recessions than in expansions and (2) the form of the distribution of price changes is regime-specific. Fourteen out of fifteen industries have fluctuations consistent with this oligopoly pricing model.

Wilson, Berry K.

PD December 1996. **TI** The Demise of Double Liability as an Optimal Contract for Large-Bank Stockholders. **AU** Wilson, Berry K.; Kane, Edward J. **AA** Wilson: Federal Communications Commission. Kane: Boston College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5848; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 16. **PR** \$5.00. **JE** G21, G30, K12, L14, N20. **KW** Corporate Finance. Banking. Limited Liability. Contract Theory. Law.

AB This paper tests the optimal-contracting hypothesis, drawing upon the data from a natural experiment that ended during the Great Depression. The subjects of our experiment are bank stockholders. The experimental manipulation concerns the imposition of state or federal restrictions on the contracts they write with bank creditors. The authors contrast stockholders that were subject to the now-conventional privilege of limited liability with stockholders that faced an additional liability in liquidation tied to the par value of the bank's capital. The authors' test shows that optimal contracting theory can provide an explanation both for the long survival of extended-liability rules in banking and for why they were abandoned in the 1930's.

TI Bank Capital and Bank Structure: A Comparative Analysis of the US, UK and Canada. **AU** Saunders, Anthony; Wilson, Berry K.

Winters, Paul

PD June 1998. **TI** Family and Community Networks in Mexico-US Migration. **AU** Winters, Paul; de Janvry, Alain; Sadoulet, Elisabeth. **AA** Winters: International Potato Center. de Janvry and Sadoulet: University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 846; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website:

agecon.lib.umn.edu/ucb.html. **PG** 32. **PR** \$8.00 Domestic; \$16.00 International Surface Rate; not available after publication. **JE** D19, F22. **KW** Household. Family Networks. Community Networks. Migration.

AB A household's migration decision is based on information the household has on the expected returns to migration. Information on migration flows from both family migrant networks (private information) and community migrant networks (public information). Using data from a national survey of rural Mexican households, we show the importance of networks in both the decision to migrate and the level of migration. We find that community and family networks are substitutes in the production of information suggesting that, once migration is well established in a community, family networks become less important. In addition, the development of strong community networks erases the role of household characteristics in migration, allowing those initially least favored to also participate in migration. Results suggest that policies designed to reduce Mexico-U.S. migration should focus on regions where migrant networks are yet weakly developed since, once strong community networks become established, reducing migration would require much higher levels of public investments.

TI Localized and Incomplete Mutual Insurance.
AU Murgai, Rinku; Winters, Paul; Sadoulet, Elisabeth; de Janvry, Alain.

Wise, David A.

TI The Taxation of Pensions: A Shelter Can Become A Trap.
AU Shoven, John B.; Wise, David A.

Woittiez, Isolde

PD February 1997. **TI** Social Interactions and Habit Formation in a Model of Female Labor Supply. **AU** Woittiez, Isolde; Kapteyn, Arie. **AA** Woittiez: University of Leiden. Kapteyn: CentER for Economic Research and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9741; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 25. **PR** no charge. **JE** J22. **KW** Labor Supply. Habit Formation. Reference Group.

AB This paper investigates the influence of habit formation and preference interdependence on labor supply behavior of married females. A novelty of the paper is that we incorporate direct survey information on reference groups of individuals in a neoclassical labor supply model. For that purpose we first estimate a latent variables model relating the direct information to the true but unobserved reference groups. One of the most interesting features of the model is that the preferences of young children becomes an insignificant factor in the hours equation while it remains a significant factor in the participation decision. In addition, the labor supply curve is much flatter in a model with habit formation and preference interdependence contribute significantly to the explanation of female labor supply.

Wolf, Holger

TI Does the Nominal Exchange Rate Regime Matter?
AU Ghosh, Atish R.; Gulde, Anne-Marie; Ostry, Jonathan D.; Wolf, Holger C.

Wood, Paul R.

TI Capital Inflows, Financial Intermediation, and Aggregate Demand: Empirical Evidence from Mexico and other Pacific Basin Countries. **AU** Kamin, Steven B.; Wood, Paul R.

Worrall, Tim

TI Informal Insurance Arrangements in Village Economies.
AU Ligon, Ethan; Thomas, Jonathan P.; Worrall, Tim.

Wurtz, Allan H.

PD September 1997. **TI** The Effect of Nuisance Parameters on Size and Power; LM Tests in Logit Models. **AU** Wurtz, Allan H.; Savin, N. E. **AA** Wurtz: University of Aarhus. Savin: University of Iowa. **SR** Aarhus Department of Economics Working Paper: 1997/17; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eeo.aau.dk/afn. **PG** 24. **PR** no charge. **JE** C12, C15, C25. **KW** Composite Hypotheses. Information Matrix. Lagrange-Multiplier Test. Logit Model. Nuisance Parameter.

AB In econometrics, most null hypotheses are composite, dividing the parameters into parameters of interest and nuisance parameters. Typically, a composite hypothesis can be tested using two or more testing procedures. Competing testing procedures are commonly compared using size-corrected powers. What is often overlooked is that the size-corrected critical value of a test can be sensitive to the set of admissible values of the nuisance parameters, and hence its size-corrected power. As a result, different choices for the admissible set can produce different conclusions about which test is best. This fact complicates the interpretation of Monte Carlo power studies because in many cases there is no natural definition of the set of admissible values. We find this fact to be crucial when choosing a Lagrange Multiplier test in the case of a logit model. A theoretical explanation for this effect is developed using large parameter asymptotics.

Wyplosz, Charles

TI Options for the Future Exchange Rate Policy of the EMU. **AU** Begg, David K.; Giavazzi, Francesco; Wyplosz, Charles.

Xiao, Zhijie

PD September 1997. **TI** An ADF Coefficient Test for a Unit Root in ARMA Models of Unknown Order with Empirical Applications to the US Economy. **AU** Xiao, Zhijie; Phillips, Peter C. B. **AA** Xiao: University of Illinois. Phillips: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1161; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 17. **PR** no charge up to 3 papers; \$3.00 domestic; 4.00 International. **JE** C12, C22. **KW** ADF Test. Efficient Trend. Quasi Differencing. Unit Root.

AB This paper proposes an ADF coefficient test for detecting the presence of a unit root in ARMA models of unknown order. The authors' approach is fully parametric. When the time series has an unknown deterministic trend, they propose a modified version of the ADF coefficient test based on quasi-differencing in the construction of the detrending regression as in Elliot, Rothemberg and Stock (1996). The limit distributions of these test statistics are derived. Empirical applications of these tests for common macroeconomic time series in the U.S. economy

are reported and compared with the usual ADF t-test.

Yamauchi, Hiroaki

TI The Pricing Formula for Commodity-Linked Bonds with Stochastic Convenience Yields and Default Risk. **AU** Miura, Ryozo; Yamauchi, Hiroaki.

Yang, Dennis Tao

PD September 1996. **TI** Rural-Urban Disparity and Sectoral Labor Allocation in China. **AU** Yang, Dennis Tao; Zhou, Hao. **AA** Duke University. **SR** Duke University Department of Economics Working Papers: 97/02; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 35. **PR** no charge. **JE** J61, O15, O53, P21. **KW** Urban Bias. China. Consumption Gaps. Income Gaps. Labor Mobility.

AB This paper examines China's rural-urban segmentation and its causes in the context of economic reforms. Household survey and aggregate data indicate a V-shaped process in which the rural-urban consumption and income differentials decreased between 1978-85, but then have continually increased historically high levels. This sectoral division is consistent with production function estimates based on provincial data that reveal higher labor productivity in urban/state-owned industries than in rural industries and agriculture. To explain the V-shaped change, the authors argue that the precedent of successful rural reforms raised farmers' relative earnings, but the remaining obstacles for an efficient sectoral allocation of labor have prevented China from eliminating dualism. The recent financial policies consisting of urban price subsidies and increased investment credits have also had influential distribution effects biased against the rural sector.

PD February 1997. **TI** Human Capital, Entrepreneurship, and Farm Household Earnings. **AU** Yang, Dennis Tao; An, Mark Yuying. **AA** Duke University. **SR** Duke University Department of Economics Working Papers: 97/03; available only through Web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 33. **PR** no charge. **JE** J43, O12, O15. **KW** Human Capital. Allocative Efficiency. Multiple Production. Profit Functions. Household Earnings.

AB Farm households in modern environments engage in multiple productive activities. In this paper the authors formulate and estimate a profit maximization model in which human capital enhances earnings through both activity-specific effects and across-activity factor allocation. The authors purpose is to decompose these contributions. The model is estimated using Chinese household data that contain detailed activity information. They find that schooling and experience improve the allocation of family-supplied inputs between agricultural and non-agricultural uses, counting for 46 percent of their total returns. The evidence suggests that studies ignoring activity choice could substantially undervalue the role of human capital in development.

Yang, Maria

TI Business Groups and Trade in East Asia: Part 2, Product Variety. **AU** Feenstra, Robert; Yang, Maria; Hamilton, Gary G.

Yelden, A. E.

TI How Fiscal Mis-Management May Impede Trade

Reform: Lessons From an Intertemporal Multi-Sector General Equilibrium Model for Turkey. **AU** Diao, X.; Roe, T. L.; Yelden, A. E.

Yermack, David

TI Taking Stock: Does Equity-Based Compensation Increase Managers' Ownership? **AU** Ofek, Eli; Yermack, David.

Yeung, Henry Wai-Chung

TI Accounting for Outward Direct Investment from Hong Kong and Singapore: Who Controls What? **AU** Low, Linda; Ramstetter, Eric D.; Yeung, Henry Wai-Chung.

Yi, Sang-Seung

TI Vertical Foreclosure With the Choice of Input Specifications. **AU** Choi, Jay Pil; Yi, Sang-Seung.

Yndgaard, Ebbe

PD December 1997. **TI** The Hobson-Marshall Controversy on the Marginal Product of Labor. **AA** University of Aarhus. **SR** Aarhus Department of Economics Working Paper: 1997/24; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK- 8000 Aarhus C, Denmark. Website: www.eco.aau.dk/afn. **PG** 11. **PR** no charge. **JE** B30, B40, D10, D20, D30. **KW** Marginal Product. Endogenization of Technology. Externality.

AB On the occasion of the one hundred years' anniversary an unsettled dispute between John Hobson and Alfred Marshall is revived. The paper argues that Marshall misunderstood Hobson who by claiming that the choice of technique is endogenous arrives at the conclusion that marginal labor is an indeterminate and hence inoperational concept.

Young, Alwyn

PD July 1997. **TI** The Razor's Edge: Distortions, Incremental Reform and the Theory of the Second Best in the People's Republic of China. **AA** Boston University. **SR** University of Western Ontario Papers in Political Economy: 81; Department of Economics, Social Science Center, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.ssel.uwo.ca/economics. **PG** 71. **PR** no charge. **JE** Not available. **KW** Not available.

AB Not available.

Yuen, Chi-Wa

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

Zellner, Arnold

PD February 1998. **TI** Alternative Functional Forms for Production, Cost and Returns to Scale Functions. **AU** Zellner, Arnold; Ryu, Hang K. **AA** Zellner: University of California, Berkeley. Ryu: University of Chicago. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 832; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/uch.html. **PG** 40. **PR** \$10.00

Domestic; \$20.00 International Surface Rate; not available after publication. **JE** C11. **KW** Bayesian Methods. Production Functions. Monotonic Transformation.

AB We consider generalized production functions, introduced in Zellner and Revankar (1969), for output $y = g(f)$ where g is a monotonic function and f is a homogenous production function. For various choices of the scale elasticity or returns to scale as a function of output, differential equations are solved to determine the associated forms of the monotonic transformation, $g(f)$. Then by choice of the form of f , the elasticity of substitution, constant or variable, is determined. In this way, we have produced and generalized a number of homothetic production functions, some already in the literature. Also, we have derived and studied their associated cost functions to determine how their shapes are affected by various choices of the scale elasticity and substitution elasticity functions. In general, we require that the returns to scale function be a monotonically decreasing function of output and that associated average cost functions be U- or L-shaped with a unique minimum. We also represent production functions in polar coordinates and show how this representation simplifies study of production functions' properties. Using data for the U.S. transportation equipment industry, maximum likelihood and Bayesian methods are employed to estimate many different generalized production functions and their associated average cost functions. In accord with results in the literature, it is found that the scale elasticities decline with output and that average cost curves are U- or L-shaped with unique minima.

TI Further Results on Bayesian Method of Moments Analysis of the Multiple Regression Model. **AU** Tobias, Justin; Zellner, Arnold.

PD February 1998. **TI** Bayesian Method of Moments (BMOM) Analysis of Parametric and Semiparametric Regression Models. **AU** Zellner, Arnold; Tobias, Justin; Ryu, Hang K. **AA** Zellner: University of California, Berkeley. Tobias: University of Chicago. Ryu: Chung Ang University. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 834; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 35. **PR** \$8.75 Domestic; \$17.50 International Surface Rate; not available after publication. **JE** C11. **KW** Bayesian Method. Regression Models. Monte Carlo. BMOM.

AB The Bayesian Method of Moments is applied to semiparametric regression models using alternative series expansions of an unknown regression function. We describe estimation loss functions, predictive loss functions and posterior odds as techniques to determine how many terms in a particular expansion to keep and how to choose among different types of expansions. The developed theory is then applied in a Monte-Carlo experiment to data generated from a CES production function.

Zhao, Jinhua

TI Common Ground Between Frec-Traders and Environmentalists. **AU** Karp, Larry; Saeheti, Sandcep; Zhao, Jinhua.

Zheng, Charles Zhoucheng

PD December 1997. **TI** The Optimal Design of First-

Price Auctions with Financial Constraints and Default Risks. **AA** University of Minnesota. **SR** University of Minnesota Center for Economic Research Discussion Paper: 301; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 63. **PR** no charge. **JE** C72, D44, L96. **KW** Auctions. Default Risk. Limited Liability. C-Block Auctions. Spectrum Auctions.

AB This paper provides a complete solution for first-price auctions, with default risk included. For each level of the interest subsidy, the authors solve the auction game and give a closed form solution for symmetric equilibrium. From this they determine each bidder's behavior as a function of the interest charged by the seller. This behavior exhibits the following novel bifurcation: for low interest rates, poor firms bid high and rich firms bid low; for high interest rates, the reverse is true. At the critical rate, bids from poor and rich firms are identical. From the seller's point of view, the authors obtain a formula showing expected profit as a function of the interest subsidy. This allows computation of a best subsidy. The authors show that the best rate is always larger than the critical rate. These results are especially applicable to auctions of large projects, where bidders' financial constraints are significant.

Zhou, Hao

TI Rural-Urban Disparity and Sectoral Labor Allocation in China. **AU** Yang, Dennis Tao; Zhou, Hao.

Zwaneveld, Peter J.

TI Decision Support System Help Railed to Search for Win-Win Solutions in Railway Network Design. **AU** Odijk, Michiel A.; Zwaneveld, Peter J.; Hooghiemstra, Jurjen S.; Kroon, Leo G.; Salomon, Marc.