ABSTRACTS OF WORKING PAPERS IN ECONOMICS

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Abowd, John M.

PD May 1995. **TI** A La Recherche Des Moments Perdus: Covariance Models for Unbalanced Panels with Endogenous Death. **AU** Abowd, John M.; Crepon, Bruno; Kramarz, Francis; Trognon, Alain. **AA** Abowd: Cornell University and National Bureau of Economic Research. Crepon, Kramarz, and Trognon: CREST/INSEE. **SR** National Bureau of Economic Research Technical Paper: 180; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C23, L11. **KW** Unbalanced Panels. Endogenous Death. Structural Autocorrelation.

AB We develop a model for decomposing the covariance structure of panel data on firms into a part due to permanent heterogeneity, a part due to differential histories with unknown ages, and a part due to the evolution of economic shocks to the firm. Our model allows for the endogenous death of firms and correctly handles the problems arising from the estimation of this death process. We implement this model on an unbalanced longitudinal sample of French firms which have both known and unknown ages and histories. For firms with unknown birthdates, we find that the structural autocorrelation in employment, compensation and capital is dominated by the part due to initial heterogeneity and random growth rates. Serial correlation in the periodic shocks is less important. For these firms, profitability, value-added and indebtedness have processes in which the heterogeneity components are less important. Firms with known birthdates and histories (which are younger than the censored firms) have autocorrelation structures dominated by the heterogeneity.

Acar, Emmanuel

PD September 1995. **TI** A Theoretical Analysis of Trading Rules: An Application to the Moving Average Case With Markovian Returns. **AU** Acar, Emmanuel; Satchell, Stephen E. **AA** Acar: Banque Nationale de Paris. Satchell: University of Cambridge. **SR** Birkbeck Discussion Paper in Financial Economics: FE/06/95; Birkbeck College, Department of Economics, 7/15 Gresse Street, London W1P 2LL, England. **PG** 13. **PR** no charge. **JE** G12, G13. **KW** Markovian Returns. Trading Rules. Realized Returns.

AB A general framework for analyzing trading rules is presented. We discuss different return concepts and different statistical processes for returns. We then concentrate on moving average trading rules and show, in the case of moving average models of length two, closed form expressions for the characteristic function of realized returns when the underlying return process follows a switching Markovian Gaussian process.

Acemoglu, Daron

PD September 1996. **TI** Technology, Unemployment, and Efficiency. **AA** Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 96/26; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 11. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** J31, O33. **KW** Technology. Skills. Search. Training.

AB This paper analyzes technology choices and unemployment in search equilibrium. In contrast to standard search models, the presence of technology choices makes the decentralized equilibrium inefficient; there is too little investment in skills, too little job creation, and there can be multiple equilibria. The paper also shows that technological progress is likely to be slower in labor markets where job tenure is low.

PD October 1996. **TI** Why Did the West Extend the Franchise? Democracy, Inequality and Growth in Historical Perspective. **AU** Acemoglu, Daron; Robinson, James A. **AA** Acemoglu: Massachusetts Institute of Technology. Robinson: University of Southern California. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 96/32; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 46. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** D72, O15. **KW** Democracy. Enfranchisement. Growth. Inequality. Redistribution. Revolution.

AB During the nineteenth century, most Western societies extended the franchise, and then undertook previously unprecedented redistributive programs. We argue that these political reforms can be viewed as strategic decisions by elites to prevent widespread social unrest and revolution. This account suggests a new view of the origins of redistributive politics, a different explanation for the Kuznets curve, and new links between democracy and growth. We characterize the conditions under which an economy would go through the equilibrium path experienced by Western societies, as opposed to an "autocratic disaster" with stagnation at a low level of per capita income and high inequality, or an "East Asian" type of development path with high output, low inequality, but no democracy.

PD October 1996. **TI** Good Jobs Versus Bad Jobs: Theory and Some Evidence. **AA** Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 96/33; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 52. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** D83, J24, J31. **KW** Job Composition. Minimum Wage. Search. Unemployment Insurance. Wage Differentials.

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

PD March 1997. **TI** Setting Standards: Information Accumulation in Development. **AU** Acemoglu, Daron; Zilibotti, Fabrizio. **AA** Acemoglu: Massachusetts Institute of Technology and Center for Economic Policy Research. Zilibotti: University of Pompeu Fabra and Center for Economic Policy Research. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 97/06; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 43. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** D82, M13, O13, O14, O40. **KW** Information. Development. Agency Costs. Incentives. Relative Performance. Evaluation.

AB We propose a model in which economic relations and institutions in advanced and less developed economies differ as these societies have access to different amounts of information. This lack of information makes it hard to give the right incentives to managers and entrepreneurs. We argue that differences in the amount of information arise because of the differences in the scale of activities in rich and poor economies; namely, there is too little repetition of similar activities in poor economies, thus insufficient information to set the appropriate standards for firm performance. Our model predicts a number of institutional and structural transformations as the economy accumulates capital and information.

PD April 1997. **TI** Efficient Wage Dispersion. **AU** Acemoglu, Daron; Shimer, Robert. **AA** Acemoglu: Massachusetts Institute of Technology. Shimer: Princeton University. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 97/07; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 47. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** D83, J31, J41. **KW** Efficiency. Search. Sorting. Wage Dispersion. Wage Posting. Technology Choice.

AB In market economies, identical workers receive very different wages, violating the Walrasian "law of one price." We argue that in the absence of a Walrasian auctioneer to coordinate trade, wage dispersion among identical workers is an equilibrium phenomenon. Moreover, wage dispersion is necessary for an economy to function efficiently. In the absence of wage dispersion, workers have little incentive to gather information, effectively giving monopsony power to firms. This depresses wages and leads to excessive entry of firms and worker nonparticipation. Adding to these inefficiencies, firms curtail irreversible capital investments in these tight labor market conditions, and so the quality of jobs is excessively low. Finally, our theory predicts that if ex ante homogenous firms can choose their production technology, those that offer higher wages will choose better technology. Therefore, in contrast to previous explanations of wage dispersion based on exogenous technology differences, our approach explains technology dispersions among firms as a result of endogenous wage dispersion and suggests that both of these phenomena may be efficient from a third-best viewpoint.

PD June 1997. **TI** The Labor Market and Corporate Structure. **AU** Acemoglu, Daron; Newman, Andrew. **AA** Acemoglu: Massachusetts Institute of Technology. Newman: Columbia University. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 97/08; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 38. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** J41, L23. **KW** Corporate Structure. Efficiency Wages. Labor Regulations. Monitoring. Moral Hazard.

AB We analyze the impact of labor demand and labor market regulations on the corporate structure of firms. We find that higher wages are associated with lower monitoring, irrespective of whether these high wages are caused by labor market regulations, unions or higher labor demand. These comparative static results are in line with broad trends in the data. We also find that the organization of firms has important macroeconomic implications. In particular, monitoring is a type of "rent-seeking" activity and the decentralized equilibrium spends excessive resources on monitoring. Labor market regulations that reduce monitoring by pushing wages up may increase net output or reduce it by a small amount even though they reduce employment.

PD June 1997. **TI** Efficient Unemployment Insurance. **AU** Acemoglu, Daron; Shimer, Robert. **AA** Acemoglu: Massachusetts Institute of Technology. Shimer: Princeton University. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 97/09; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 37. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** D83, J64, J65. **KW** Capital Investment. Efficiency. Risk-Aversion. Search. Unemployment Insurance. Wage Offer.

AB This paper argues that moderate unemployment insurance not only reduces the uncertainty faced by risk-averse workers but also improves efficiency and raises output. We develop a model in which the decentralized equilibrium is inefficient without unemployment insurance, because the labor market endogenously creates jobs that provide risk- averse workers with low unemployment risk and low wages. Essentially, the labor market offers its own version of insurance. In doing so, however, it inefficiently distorts resource allocation. This is because the flip side of workers facing low unemployment risk, is that firms are often unable to fill their vacancies. They respond to this high vacancy risk by reducing capital investments. Unemployment insurance makes workers accept more unemployment risk, thus inducing firms to create high wage, high capital jobs, and restoring efficiency. A by-product of this analysis is a tractable general equilibrium model of search with risk-averse workers and incomplete insurance.

Adams, James

PD March 1996. **TI** Measuring Science: An Exploration. **AU** Adams, James; 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: 5478; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 18. **PR** $5.00. **JE** L84, D24. **KW** Research. Science. Productivity.

AB This paper examines the available U.S. data on academic R&D expenditures and the number of papers published and the number of citations to these papers as possible measures of "output" of this enterprise. Using a new set of data on papers and citations, based on an "expanding" set of journals and the newly released R&D deflators, the appearance of diminishing returns diminishes but the question is raised of why the input prices of academic R&D are rising so much faster than either the GDP deflator or the implicit R&D deflator in industry. A production function analysis of such data at the individual field- university level follows. It indicates significant diminishing returns to "own" R&D. When the authors substitute scientists and engineers in place of R&D as the right hand side variables, the coefficient on papers rises, indicating systematic measurement problems with R&D as the sole input into the production of scientific output. But allowing for individual university-field effects drives theses numbers down significantly below unity. Since in the aggregate both paper numbers and citations are growing as fast or fast than R&D, this finding can be interpreted as leaving a major, yet unmeasured role, for the contribution of spillovers from other fields, other universities, and other countries.

Agenor, Pierre-Richard

PD January 1996. **TI** Wage Dispersion and Technical Progress. **AU** Agenor, Pierre-Richard; Aizenman, Joshua. **AA** Agenor: International Monetary Fund. Aizenman: Dartmouth College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5417; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** $5.00. **JE** D31, J31. **KW** Skills. Inequality. Wages. Education.

AB Since the early 1980's, wage dispersion and the ratio of skilled to unskilled employment have increased significantly in several industrial countries. A number of economists have attributed these trends to skill- biased technical progress. This paper studies the wage and employment effects of technological changes of this type. The analysis is based on a model with a heterogeneous work force and a segmented labor market. Skill-biased technical progress is modeled as a shock that switches demand from unskilled to skilled labor in the primary, high-wage sector, while leaving the total demand for labor in that sector constant at initial wages. Such a shock reduces total employment in the primary sector, as the equilibrium increase in skilled labor employment is smaller than the fall in employment of unskilled labor. Efficiency factors are shown to magnify the adverse employment effects of pro- skilled technical change.

Aguirregabiria, Victor

PD February 1996. **TI** Estimation of Dynamic Decision Models with Corner Solutions: A Model of Price and Inventory Decisions. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Reports: RR/9602; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. **PG** 47. **PR** $10.00. **JE** C34, C35, D92, E31, L81. **KW** Decision Models. Limited Dependent Variables. (S, s) Models. Lump-Sum Costs. Corner Solutions.

AB This paper proposes and applies a method of moments to estimate dynamic decision models with corner solutions. The method extends previous results by Hotz and Miller (1993) and Pakes (1994), and it allows for unobserved state variables affecting both the continuous choice (interior solution) and the discrete choice (interior solution/corner solution). The method is applied to estimate a model of price and inventory decisions using data of individual goods from a supermarket chain. The estimation shows that lump-sum ordering costs and lump-sum price adjustment costs are significant but ordering costs are quantitatively more important. Numerical solutions of the model show that, in that context, the interaction between price and inventory decisions can explain the relatively high frequency of nominal price reductions observed in the data.

PD February 1997. **TI** Employment Occupational Structure, Technological Capital and Reorganization of Production. **AU** Aguirregabiria, Victor; Alonso-Borrego, Cesar. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Report: 9703; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. **PG** 23. **PR** $10.00. **JE** C33, J21, J44, L23. **KW** Labor Demand. Occupational Structure. Reorganization Effects. Panel Data.

AB This paper analyzes the role of skill-biased technological progress on the recent changes in the occupational structure of Spanish manufacturing employment. Our dataset consists of a panel of Spanish manufacturing firms during the period 1986-1991. We confirm a puzzle that has been found in other OECD countries: investment in capital inputs is clearly procyclical, but destruction of unskilled jobs and creation of skilled jobs have been concentrated during the recession. However, we also find that the number of firms who invest by first time in technological capital has been clearly countercyclical. Based on this evidence, we estimate a dynamic model where firms take discrete decisions about what labor and capital inputs to use, and continuous decisions on the amount of each selected input. After controlling for individual heterogeneity and self-selection we find that these two decisions have different effects on occupational structure. In particular, we find that for new innovative firms the introduction of technological capital has significant and sizable effects on occupational structure of employment.

Ait-Sahalia, Yacine

PD March 1996. **TI** Dynamic Equilibrium and Volatility in Financial Asset Markets. **AA** University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5479; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 21. **PR** $5.00. **JE** G12, G14, C72. **KW** Asset Pricing. Volatility. Market Microstructure.

AB This paper develops and estimates a continuous-time model of a financial market where investors' trading strategies and the specialist's rule of price adjustments are the best response to each other. The authors examine how far modeling market microstructure in a purely rational framework can go in expanding alleged asset pricing "anomalies." The model produces some major findings of the empirical literature: excess volatility of the market price compared to the asset's fundamental value, serially correlated volatility, contemporaneous volume-volatility correlation, and excess kurtosis of price changes. The authors implement a nonlinear filter to estimate the unobservable fundamental value, and avoid the discretization bias by computing the exact conditional moments of the price and volume processes over time intervals of any length.

Aizenman, Joshua

PD December 1995. **TI** Volatility, Investment and Disappointment Aversion. **AU** Aizenman, Joshua; Marion, Nancy. **AA** Aizenman: Dartmouth College and National Bureau of Economic Research. Marion: Dartmouth College. **SR** National Bureau of Economic Research Working Paper: 5386; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 15. **PR** $5.00. **JE** D84, E23, E21. **KW** Nonexpected Utility. Investment. Savings. Uncertainty.
AB This study uncovers a statistically significant negative correlation between volatility and private investment over the 1970-93 period in a set of almost fifty developing countries and provides a possible interpretation of this result by using the disappointment-aversion expected utility framework first described by Gul (1991). This paper demonstrates that for a number of different volatility measures, higher volatility reduces private investment in developing countries. When agents are disappointment-averse, they put more weight on "bad" outcomes and less weight on "good" outcomes than in the standard case. The asymmetric weighting of outcomes introduces additional concavity into the utility function and causes volatility to have significant, negative effects on economic performance.

TI Wage Dispersion and Technical Progress. **AU** Agenor, Pierre-Richard; Aizenman, Joshua.

Aldrich, John

PD June 1996. **TI** Doing Least Squares: Some Success From History. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9630; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 37. **PR** no charge. **JE** C10, C20. **KW** Yule. Least Squares. Partial Correlation. Gauss-Markov Theorem. Frisch-Waugh Theorem.
AB In 1809/11 Gauss introduced a procedure for obtaining least squares estimates and their precisions. This has come down to us as Gaussian elimination. In 1907 Yule introduced a new system of least squares notation adapted to correlation analysis. This paper compares these historically important formalisms with those used in modem regression analysis.

Allen, Beth

PD December 1996. **TI** Cooperative Theory with Incomplete Information. **AA** Federal Reserve Bank of Minneapolis and University of Minnesota. **SR** Federal Reserve Bank of Minneapolis Staff Report: 225; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http:\Res.MPLS.FRS.Fed.USResearchRes.HTML. **PG** 20. **PR** no charge. **JE** C71, D51, D82. **KW** Asymmetric Information. Incomplete Information. Core. Market Games.
AB This paper surveys cooperative game theory when players have incomplete or asymmetric information, especially when the TU and NTU games are derived from economic models. First some results relating balanced games and markets are summarized, including theorems guaranteeing that the core is nonempty. Then the basic pure exchange economy is extended to included asymmetric information. The possibilities for such models to generate cooperative games are examined. Here the core is emphasized as a solution, and criteria are given for its completeness. Finally, an alternative approach is explored based on Harsanyi's formulation of games with incomplete information.

PD December 1996. **TI** Implementation Theory with Incomplete Information. **AA** Federal Reserve Bank of Minneapolis and University of Minnesota. **SR** Federal Reserve Bank of Minneapolis Staff Report: 226; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http:\Res.MPLS.FRS.Fed.USResearchRes.HTML. **PG** 16. **PR** no charge. **JE** C71, C72, D51, D71, D82. **KW** Incentive Compatibility. Asymmetric Information. Incomplete Information. Implementation. Cooperative Games.
AB This paper surveys implementation theory when players have incomplete or asymmetric information, especially in economic environments. After the basic problem is introduced, the theory of implementation is summarized. Some coalitional considerations for implementation problems are discussed. For economies with asymmetric information, cooperative games based on incentive compatibility constraints or Bayesian incentive compatible mechanisms are derived and examined.

Alonso-Borrego, Cesar

TI Employment Occupational Structure, Technological Capital and Reorganization of Production. **AU** Aguirregabiria, Victor; Alonso-Borrego, Cesar.

Alston, Lee J.

PD January 1996. **TI** The Determinants and Impact of Property Rights: Land Titles on the Brazilian Frontier. **AU** Alston, Lee J.; Libecap, Gary D.; Schneider, Robert. **AA** Alston: University of Illinois and National Bureau of Economic Research. Libecap: University of Arizona and National Bureau of Economic Research. Schneider: The World Bank. **SR** National Bureau of Economic Research Working Paper: 5405; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 37. **PR** $5.00. **JE** O17, O18, Q11. **KW** Brazil. Land. Property Rights. Institutions.
AB This paper provides new empirical results regarding the demand and supply of title, its impact on land value, and its effects on agricultural investment on Brazilian frontiers. The authors use survey data from 1992 and 1993 from the state of Para with data on the characteristics of the settlers, land tenure, land agencies involved, land values, and investment. The authors then turn to census data from the Brazilian agricultural census from 1940 through 1985, with observations at the municipio (country) level to examine the development of property rights to land in the southern state of Parana during the

agricultural boom between 1940 and 1970 and in the Amazon state of Para during the period of rapid migration to the region after 1970. By examining frontiers the authors can follow the rise in land values, the increase in the demand for title, and the response of government. The empirical findings support the predictions of the theory regarding the effects of title and investment on land value, the role of expected change in value on demand for title, and the contribution of title in promoting investment. Governments, however, have not exactly followed the predictions of the analytical framework in supplying title. Political and bureaucratic factors play an important role in the government response to demands for title. This result suggests that researchers must pay special attention to the complex political process by which property rights are assigned in studying the emergence of tenure institutions.

Altonji, Joseph G.

PD January 1996. **TI** Employer Learning and the Signaling Value of Education. **AU** Altonji, Joseph G.; Pierret, Charles R. **AA** Altonji: Northwestern University and National Bureau of Economic Research. Pierret: Bureau of Labor Statistics. **SR** National Bureau of Economic Research Working Paper: 5438; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** $5.00. **JE** J24, J31, D83. **KW** Screening. Signaling. Human Capital. Education.

AB If profit maximizing firms have limited information about the general productivity of new workers, they may choose to use easily observable characteristics such as years of education to "statistically discriminate" among workers. The pure credential value of education will depend on how quickly firms learn. To obtain information on employer learning, the authors work with a wage equation that contains both the interaction between experience and a hard-to-observe variable that is positively related to productivity and the interaction between experience and a variable that firms can easily observe, such as years of education. Using data from the NLSY the authors obtain preliminary estimates of the rate at which employers learn about worker quality and use these, along with some strong auxiliary assumptions, to explore the empirical relevance of the educational screening hypothesis. The authors show that even if employers learn relatively slowly about the productivity of new workers, the portion of the return to education that could reflect signaling of ability is limited.

Andersen, Lykke E.

PD January 1997. **TI** Modelling the Relationship Between Government Policy, Economic Growth, and Deforestation in the Brazilian Amazon. **AA** University of Aarhus. **SR** Aarhus Department of Economics, Working Paper: 1997/2; 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** C33, O18, Q23, Q28, R11, R13. **KW** Tropical Deforestation. Brazilian Amazon. Economic Growth. Policy Evaluation. Panel Data.

AB This paper develops a theoretical as well as an empirical model of deforestation and economic development in a tropical forest economy. The empirical model is estimated using panel data for 316 municipalities in the Brazilian Amazon during the period 1970-1985. The effects of controversial Brazilian policies, such as road building through the Amazon and subsidized credit to agricultural establishments, are evaluated both in the theoretical model and in the estimated empirical model. The paper concludes that subsidized credit, while certainly causing deforestation, is so beneficial for economic growth that the benefits seem to outweigh the environmental costs. This does not hold for road building, however, because the opening up of new land by federal road building tends to promote a wasteful use of land.

Andersen, Michael

PD December 1996. **TI** Share Prices and Investment. **AU** Andersen, Michael; Subbaraman, Robert. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia, Research Discussion Paper: 9610; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. **PG** 28. **PR** no charge. **JE** C22, E44, G14. **KW** Equity Raisings. Efficiency. Share Market. Investment. Tobin's Q.

AB This paper examines two related propositions: Australian share-price efficiency and influences of share prices on business investment. In line with similar studies overseas, we find that the Australian share market may deviate from efficient pricing over short time horizons but that there is little evidence of inefficiency over longer time horizons. To investigate the influence of share prices on investment decisions we use a simple model of real share prices to identify estimates of the "fundamental" and "speculative" components of share prices. As expected, the estimated fundamental component of real share prices is found to have a stronger relationship with investment than the aggregate real share price series. Despite some evidence of share price inefficiencies, the speculative component of real share prices is insignificant in the same investment equations. There is evidence, however, that the timing of equity raisings appears to be influenced by both components of share prices.

Andrews, Donald W. K.

PD November 1996. **TI** On the Number of Bootstrap Repetitions for Bootstrap Standard Error Estimates. **AU** Andrews, Donald W. K.; Buchinsky, Moshe. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1141; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 25. **PR** no charge. **JE** C12, C13, C15. **KW** Bootstrap. Bootstrap Repetitions. P-Value. Simulation. Standard Error.

AB This paper derives a simple formula that gives the accuracy of a bootstrap standard error estimate as a function of the number of bootstrap repetitions B. Here accuracy is defined in terms of closeness to the ideal bootstrap error estimate for which B equals infinity. The paper also provides a three-strap method for choosing B to achieve a desired level of accuracy. Analogous results are given for the asymptotic p value of a t statistic based on a bootstrap standard error estimate. Monte Carlo simulations show that the proposed methods work quite well. The results apply quite generally to bootstrap standard error estimates and asymptotic p values for parametric, semiparametric, and nonparametric estimators based on independent and identically distributed random variables.

PD December 1996. **TI** Consistent Moment Selection Procedures for Generalized Method of Moments Estimation. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1146; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 58. **PR** no charge. **JE** C12, C13, C52. **KW** Information

Criteria. Selection Procedure. Generalized Method of Moments. Instrumental Variables. Model Selection. Moment Selection. Strong Consistency.
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 latter is not consistent.) 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 variable estimation problems yields consistent procedures for selecting instrumental variables.

Angrist, Joshua D.

PD February 1995. **TI** Jackknife Instrumental Variables Estimation. **AU** Angrist, Joshua D.; Imbens, Guido W.; Krueger, Alan B. **AA** Angrist: Massachusetts Institute of Technology and National Bureau of Economic Research. Imbens: Harvard University and National Bureau of Economic Research. Krueger: Department of Labor and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 172; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C30, C51. **KW** Instrumental Variables. Two-Stage Least Squares (2SLS). Jackknife Estimators.
AB Two-stage-least-squares (2SLS) estimates are biased towards OLS estimates. This bias grows with the degree of over-identification and can generate highly misleading results. In this paper we propose two simple alternatives to 2SLS and limited-information-maximum-likelihood (LIML) estimators for models with more instruments than endogenous regressors. These estimators can be interpreted as instrumental variables procedures using an instrument that is independent of disturbances even in finite samples. Independence is achieved by using a "leave-one-out" jackknife-type fitted value in place of the usual first- stage equation. The new estimators are first-order equivalent to 2SLS but with finite-sample properties superior to those of 2SLS and similar to LIML when there are many instruments. Moreover, the jackknife estimators appear to be less sensitive than LIML to deviations from the linear reduced form used in classical simultaneous equations models.

PD June 1995. **TI** Conditioning on the Probability of Selection to Control Selection Bias. **AA** Hebrew University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 181; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C24, C51, J24. **KW** Selection Bias. Propensity Score. Instrumental Variables. Returns to Schooling.
AB Problems of sample selection arise in the analysis of both experimental and nonexperimental data. In clinical trials to evaluate the impact of an intervention on health and mortality, treatment assignment is typically nonrandom in a sample of survivors even if the original assignment is random. Similarly, randomized training interventions like National Supported Work (NSW) are not necessarily randomly assigned in the sample of working men. A non-experimental version of this problem involves the use of instrumental variables (IV) to estimate behavioral relationships. A sample selection rule that is related to the instruments can induce correlation between the instruments and unobserved outcomes, possibly invalidating the use of conventional IV techniques in the selected sample. This paper shows that conditioning on the probability of selection given the instruments can provide a solution to the selection problem as long as the relationship between instruments and selection status satisfies a simple monotonicity condition. A latent index structure is not required for this result, which is motivated as an extension of earlier work on the propensity score. The conditioning approach to selection problems is illustrated using instrumental variables techniques to estimate the returns to schooling in a sample with positive earnings.

PD January 1996. **TI** Schooling and Labor Market Consequences of the 1970 State Abortion Reforms. **AU** Angrist, Joshua D.; Evans, William N. **AA** Angrist: Hebrew University and National Bureau of Economic Research. Evans: University of Maryland and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5406; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 34. **PR** $5.00. **JE** J13, I21, J24, J15. **KW** Human Capital. Pregnancy. Race. Education.
AB This study uses the 1970 state abortion reforms to estimate the effect of teen and out-of-wedlock childbearing on the schooling and labor market outcomes of mothers observed in 1980 and 1990 Census Microdata. Reduced-form estimates suggest that state abortion reforms has a negative impact on teen marriage, teen fertility, and teen out-of- wedlock childbearing. The teen marriage effects are largest and most precisely estimated for white women while the teen fertility and out-of- wedlock childbearing effects are largest and most precisely estimated for black women. The relatively modest fertility and marriage consequences of abortion reform for white women do not appear to have changed schooling or labor market outcomes. In contrast, black women who were exposed to abortion reforms experienced large reductions in teen fertility and teen out-of-wedlock fertility that appear to have led to increased schooling and employment rates.

PD October 1996. **TI** Conditional Independence in Sample Selection Models. **AA** Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 96/27; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 17. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** C14, C24. **KW** Non-Random Samples. Selection Bias. Propensity Score.
AB Econometric sample selection models typically use a linear latent- index with constant coefficients to model the selection process and the conditional mean of the regression error in the selected sample. A feature common to most of these models is that the conditional mean function for regression errors is an invertible function of the selection propensity score, i.e., the probability of selection conditional on covariates. Consequently, conditioning on the selection propensity score controls selection bias, a fact which underlies much of the

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recent literature on non-parametric and semi-parametric selection models. This literature has not addressed the question of whether the propensity-score conditioning property is necessarily a feature of sample selection models. In this paper, I describe the conditional independence properties that make it possible to use the selection propensity score to control selection bias in a general sample selection model. The resulting characterization does not rely on a latent index selection mechanism and imposes no structure other than an assumption of independence between the regression error term and the regressors in random samples. This approach leads to a simple rule that can be used to determine if conditioning on the selection propensity score is sufficient to control selection bias.

Armstrong, Mark

PD June 1996. **TI** Price Discrimination by a Many-Product Firm. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9628; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 27. **PR** no charge. **JE** D11, D42, D82. **KW** Nonlinear Pricing. Mechanism Design. Regulation. Multiproduct Monopoly.

AB Determining the optimal selling strategy for a multiproduct firm facing consumers with unknown tastes is a difficult task. This paper aims to show how almost optimal nonlinear tariffs can often be found when the number of products becomes large. Moreover, such tariffs take a simple form. When taste parameters are independently distributed across products, the almost optimal tariff is a cost-based two-part tariff which can extract virtually all consumer surplus. When tastes are correlated across products, perhaps because of income differences across consumers, the almost optimal tariff can implemented as a menu of cost- based two-part tariffs which leaves some rents to high income consumers. Finally, an application of the technique to multi-product monopoly regulation is discussed.

TI On the Density of the Maximum Likelihood Estimator.
AU Hillier, Grant; Armstrong, Mark.

Arrighetti, Alessandro

PD August 1996. **TI** Contracts Laws, Social Norms and Inter-Firm Cooperation. **AU** Arrighetti, Alessandro; Bachmann, Reinhard; Deakin, Simon. **AA** Arrighetti: University of Parma. Bachmann: Technische Universitat Hamburg-Harburg. Deakin: University of Cambridge. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP36; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 29. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** D23, K12, L14. **KW** Contract Law. Business Co-Operation. Trade Associations. Trust.

AB This paper analyses the influence of the institutional framework for exchange upon inter-firm cooperation. The focus is on the relationship between contract law and less formal, social norms, with evidence drawn from a cross-sectoral, three-country study of contracting practice. Contrary to earlier empirical studies and to models drawn from transaction-cost theory, the authors find that contract law may play an important role in underpinning long-term, cooperative relationships and in fostering trust.

Athey, Susan

PD June 1997. **TI** Single Crossing Properties and the Existence of Pure Strategy Equilibria in Games of Incomplete Information. **AA** Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 97/11; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 51. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** C62, C63, D44, D82. **KW** Incomplete Information. Auctions. Pricing Games. Signaling Games. Supermodularity. Single Crossing.

AB This paper derives sufficient conditions for a class of games of incomplete information, such as first price auctions, to have pure strategy Nash equilibria (PSNE). The paper treats games between two or more heterogeneous agents, each with private information about his own type, and the types are drawn from an atomless joint probability distribution which potentially allows for correlation between types. Agents' utility may depend directly on the realizations of other agents' types, as in Milgrom and Weber's (1982) formulation of the "mineral rights" auction. The restriction we consider is that each player's expected payoffs satisfy the following single crossing conditions: whenever each opponent uses a nondecreasing strategy, then a player's best response strategy is also nondecreasing in her type. The paper has two main results. The first result shows that, when players are restricted to choose among a finite set of actions, games where players' objective functions satisfy the single crossing condition will have PSNE. The second result demonstrates that when players' utility functions are continuous, as well as in mineral rights auction games and other games where "winning" creates a discontinuity in payoffs, the existence result can be extended to the case where players choose from a continuum of actions.

Ayat, Leila

PD November 1996. **TI** Unit Root Tests in the Presence of Uncertainty About the Non- Stochastic Trend. **AU** Ayat, Leila; Burridge, Peter. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/28; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 19. **PR** 2 pounds; no charge to students. **JE** C22. **KW** Unit Roots. Dickey-Fuller Tests. Selection Criteria.

AB A sequential procedure for determination of trend degree and testing for a unit root is introduced; its properties are investigated by Monte Carlo experiment. We compare the performance of Augmented Dickey-Fuller tests and the "GLS" test of Elliott, Rothenberg and Stock (1996), in both cases with lag length selected by the BIC criterion. Our procedure allow for quadratic trend, and we introduce a "GLS" type of test for this case. The new procedure is advocated in preference to informal use of the usual family of unit root tests, and is applied to the inventory data analyzed in Hall (1994).

Aziz, Fahima

PD September 1995. **TI** Nutrition, Health and Labor Productivity Analysis of Male and Female Workers: A Test of the Efficiency Wage Hypothesis. **AA** University of Minnesota. **SR** University of Minnesota Economic Development Center Bulletin: 95/05; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455.

PG 66. **PR** no charge. **JE** I12, J31, J24. **KW** Labor Productivity. Efficiency Wages. Time Allocation. Nutrition.
AB The objective of this study was to examine the effect of nutrition and health on labor productivity for women and men workers on subsistence farm households. The study emerged from the well founded Efficiency Wage Hypothesis which asserts that nutrition affects labor productivity in subsistence economies. This study develops the Efficiency Wage Hypothesis further by including an anthropometric measure of health along with caloric intake and other production inputs in the productivity analysis. The conceptual model was based on an economic model of household behavior developed by Gary Becker. Through optimization it was shown that consumption and production decisions were not separable. The relevant step was to estimate an inherently non- linear production function for the household. The empirical model specified dual causality between consumption and production, and thereby used a simultaneous equation system. The empirical results showed that an increase in caloric consumption increased the female labor productivity but health, as measured by weight-for-height, of the female workers was not significant. Caloric consumption of the male workers did not contribute to their productivity but their health, as measured by weight-for-height, significantly added to the value of output.

Bachmann, Reinhard

TI Contracts Laws, Social Norms and Inter-Firm Cooperation. **AU** Arrighetti, Alessandro; Bachmann, Reinhard; Deakin, Simon.

Bak, P.

PD August 1996. **TI** Price Variations in a Stock Market with Many Agents. **AU** Bak, P.; Paczuski, M.; Shubik, M. **AA** Bak and Paczuski: Brookhaven National Laboratory. Shubik: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1132; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 26. **PR** no charge. **JE** D59, D84, E37, G12. **KW** Expectations. Stock Prices. Levy Distributions. Crowd Behavior. Bubbles.
AB Large variations in stock prices happen with sufficient frequency to raise doubts about existing models, which all fail to account for non- Gaussian statistics. We construct simple models of stock market, and argue that the large variations may be due to a crowd effect, where agents imitate each other's behavior. The variations over different time scales can be related to each other in a systematic way, similar to he Levy stable distribution proposed by Mandelbrot to describe real market indices. In the simplest, least realistic case, exact results for the statistics of the variations are derived by mapping onto a model of diffusing and annihilating particles, which has been solved by quantum field theory methods. When the agents imitate each other and respond to recent market volatility, different scaling behavior is obtained. In this case the statistics of price variations is consistent with empirical observations. The interplay between "rational" traders whose behavior is derived from fundamental analysis of the stock, including dividends, and "noise traders," whose behavior is governed solely by studying the market dynamics, is investigated.

Baldwin, Richard E.

PD January 1996. **TI** Testing for Trade-Induced Investment-Led Growth. **AU** Baldwin, Richard E.; Seghezza, Elena. **AA** Graduate Institute of International Studies and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5416; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 21. **PR** $5.00. **JE** O41, O11, O19, F11, F13. **KW** Growth. Investment. Trade Barriers.
AB Many studies have found a positive correlation between trade and growth, but do not attempt to identify the economic mechanisms involved. This paper attempts to identify one of the mechanisms linking trade and growth. In particular, the authors present a novel theoretical model that establishes a link between trade liberalization and investment-led growth. Estimating equations are derived from the model and estimated with three stage least squares on a cross-country data sample. The authors find that domestic protection depresses investment and thereby slows growth. Foreign trade barriers also lower domestic investment, but the anti-investment effect is weaker and is less robust to sample and specification changes.

Banerjee, Abhijit

PD February 1997. **TI** A Theory of Misgovernance. **AA** Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 97/04; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 62. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** D23, H40. **KW** Corruption. Redtape. Incentives.
AB This paper tries to explain why government bureaucracies are often associated with redtape, corruption and lack of incentives. The paper identifies two specific ingredients which together can provide an explanation -- the fact that governments often act precisely in situations where markets fail and the presence of agency problems within the government. We show that these problems are exacerbated at low levels of development and in bureaucracies dealing with poor people. We also argue that we need to posit the existence of a welfare-oriented constituency within the government in order to explain redtape and corruption.

Basu, Susanto

PD December 1995. **TI** Aggregate Productivity and the Productivity of Aggregates. **AU** Basu, Susanto; Fernald, John G. **AA** Basu: University of Michigan and National Bureau of Economic Research. Fernald: Federal Reserve Board. **SR** National Bureau of Economic Research Working Paper: 5382; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 37. **PR** $5.00. **JE** D24, E32, E22. **KW** Increasing Returns. Scale Effects. Productivity. Representative Firm.
AB Explanations of procyclical productivity play a key role in a variety of business-cycle models. Most of these models, however, explain this procyclicality within a representative-firm paradigm. This procedure is misleading. The authors decompose aggregate productivity changes into several terms, each of which has an economic interpretation. However, many of these terms measure composition effects such as reallocations of inputs across productive units. The authors apply this decomposition to U.S. data by aggregating from roughly the two-digit level to the private economy. The authors find that the compositional terms are significantly procyclical.

Controlling for these terms virtually eliminates the evidence for increasing returns to scale, and implies that input growth is uncorrelated with technology change.

Bauer, Thomas

PD November 1996. **TI** Unemployment and Wages of Ethnic Germans. **AU** Bauer, Thomas; Zimmermann, Klaus F. **AA** University of Munich. **SR** Centre for Economic Policy Research, Discussion Paper: 1512; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 17. **PR** 4 pounds or $8.00. **JE** F22, J31, J61, J64. **KW** Immigration. Ethnic Germans. Earnings Assimilation. Unemployment.

AB This paper uses the immigration sample of the German Socioeconomic Panel to analyze the earnings and unemployment assimilation of ethnic Germans who entered West Germany within the last ten years. The empirical analysis suggests that there is no earnings differential between immigrants from Eastern Europe and comparable East Germans at the time of immigration. With longer time of residence the earnings of former East Europeans rise faster than those of East Germans, however. Migrants from Poland and the former USSR have higher unemployment risks than those from East Germany or Romania. Ethnic networks are shown to be very useful for a successful integration into the labor market.

Baye, Michael R.

PD May 1997. **TI** Necessary and Sufficient Conditions for Existence and Uniqueness of Bertrand Paradox Outcomes. **AU** Baye, Michael R.; Morgan, John. **AA** Baye: Penn State University. Morgan: Princeton University. **SR** Princeton Woodrow Wilson School, Discussion Paper in Economics: 186; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. **PG** 10. **PR** no charge. **JE** C72, D43. **KW** Bertrand Paradox. Mixed Strategy. Oligopoly. Price Competition.

AB We show that under the assumptions specified in standard textbook statements of the paradox (including the Handbook of Industrial Organization and the Handbook of Game Theory) there also exist mixed strategy Nash equilibrium in which firms earn positive profits. This, quite naturally, leads us to present (minimal) conditions that guarantee the uniqueness of the zero profit Bertrand outcome. While the conditions for uniqueness are not especially onerous, our paper highlights the need for additional care in the specification of Bertrand-type games before asserting that marginal cost pricing is the unique equilibrium outcome.

Bekaert, Geert

PD January 1996. **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: Duke University. **SR** National Bureau of Economic Research Working Paper: 5445; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 28. **PR** $5.00. **JE** F31, F33. **KW** Foreign Exchange. Target Zone. Germany. EMS.

AB In this paper the authors develop an empirical model of exchange rates in a target zone. The model is general enough to nest most theoretical and empirical models in the existing literature. The authors find evidence of two types of jumps in exchange rates. Realignment jumps are those that are associated with the periodic realignments of the target zone and within-the-band jumps are those that can be accommodated within the current target zone. The authors incorporate jumps, in general, by conditioning the distribution of exchange rate changes on a jump variable where the probability and size of a jump vary over time as a function of financial and macroeconomic variables. With this more general model, the authors revisit 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, the authors conclude that the FF/DM rate exhibits considerable non- linearities, realignments are predictable and the credibility of the system did not increase after 1987. Moreover, the model implies that the foreign exchange risk premium becomes larger during speculative crises.

PD January 1996. **TI** On Biases in Tests of the Expectations Hypothesis of the Term Structure of Interest Rates. **AU** Bekaert, Geert; Hodrik, Robert J.; Marshall, David A. **AA** Bekaert: Stanford University and National Bureau of Economic Research. Hodrik: Northwestern University and National Bureau of Economic Research. Marshall: Federal Reserve Bank of Chicago. **SR** National Bureau of Economic Research Technical Paper: 191; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C52, E43, G12. **KW** Term Structure. Interest Rates. Expectations Hypothesis. Biases.

AB We document extreme bias and dispersion in the small sample distributions of five standard regression tests of the expectations hypothesis of the term structure of interest rates. These biases derive from the extreme persistence in short interest rates. We derive approximate analytic expressions for these biases, and we characterize the small-sample distributions of these test statistics under a simple first-order autoregressive data generating process for the short rate. The biases are also present when the short rate is modeled with a more realistic regime-switching process. The differences between the small-sample distributions of test statistics and the asymptotic distributions partially reconcile the different inferences drawn when alternative tests are used to evaluate the expectations hypothesis. In general, the test statistics reject the expectations hypothesis more strongly and uniformly when they are evaluated using the small-sample distributions, as compared to the asymptotic distributions.

Bental, Benjamin

PD January 1996. **TI** Growth Effects of Subsidies in a Search Theoretic R&D Model: A Quantitative Evaluation. **AU** Bental, Benjamin; Peled, Dan. **AA** Bental: Israel Institute of Technology. Peled: Israel Institute of Technology and University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Reports: RR/9603; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. **PG** 28. **PR** $10.00. **JE** D83, 032. **KW** Research and Development. Growth. Optimal Search. Technology. Subsidies.

AB When growth depends on technological improvements resulting from R&D investment of the business sector, does it pay to subsidize the business sector? Does it matter whether subsidies are earmarked to R&D, or given as general capital subsidies? Based on a model of perpetual growth through optimal search for better technologies, calibrated on time series data from the Israeli economy, it is shown that capital subsidies produce a definite gain in expected growth rates, but those gains are invariant to the particular restrictions associated with the subsidies. Those restrictions, however, are not completely innocuous, and change the growth rates of total factor productivity.

Bergemann, Dirk

PD September 1996. **TI** Market Diffusion with Two-Sided Learning. **AU** Bergemann, Dirk; Valimaki, Juuso. **AA** Bergemann: Yale University. Valimaki: Northwestern University. **SR** Yale Cowles Foundation Discussion Paper: 1138; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 42. **PR** no charge. **JE** C73, D43, D83. **KW** Dynamic Duopoly. Learning. Market Shares. Diffusion.

AB The diffusion of a new product of uncertain value is analyzed in a duopolistic market in continuous time. The two sides of the market, buyers and sellers, learn the true value of the new product over time as a result of experimentation. Buyers have heterogeneous preferences over the products and sellers compete in prices. The pricing policies and market shares of the sellers in the unique Markov perfect equilibrium are obtained explicitly. The dynamics of the equilibrium market shares display excessive sales of the new product relative to he social optimum in early stages and too low sales later on. The dynamic resolution of uncertainty implies ex post differentiation and hence both sellers value information positively. As information is generated only by experiments with the new product, this relaxes the price competition in the dynamic setting. Finally, the diffusion path of a successful product is shown to be S-shaped.

Berkowitz, Jeremy

TI Dynamic Equilibrium Economies: A Framework for Comparing Models and Data. **AU** Diebold, Francis X.; Ohanian, Lee E.; Berkowitz, Jeremy.

Bernanke, Ben S.

PD January 1996. **TI** Nominal Wage Stickiness and Aggregate Supply in the Great Depression. **AU** Bernanke, Ben S.; Carey, Kevin. **AA** Bernanke: Princeton University and National Bureau of Economic Research. Carey: University of Miami. **SR** National Bureau of Economic Research Working Paper: 5439; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** $5.00. **JE** E12, E24, E32, N12, J21. **KW** Sticky Wages. Great Depression. Recession. Labor Markets. Gold Standard.

AB Building on earlier work by Eichengreen and Sachs, the authors use data for 22 countries to study the role of wage stickiness in propagating the Great Depression. Recent research suggests that monetary shocks, transmitted internationally by the gold standard, were a major cause of the Depression. Accordingly, the authors use money supplies and other aggregate demand shifters as instruments to identify supply relationships. The authors find that nominal wages adjusted quite slowly to falling prices, and that the resulting increases in real wages depressed output. These findings leave open the question of why wages were so inertial in the face of extreme labor market conditions.

Bernstein, Jeffrey I.

PD December 1995. **TI** International R&D Spillovers Between Canadian and Japanese Industries. **AU** Bernstein, Jeffrey I.; Yan, Xiaoyi. **AA** Bernstein: Carleton University and National Bureau of Economic Research. Yan: York University. **SR** National Bureau of Economic Research Working Paper: 5401; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 19. **PR** $5.00. **JE** D62, O33, F12. **KW** Canada. Japan. Research. Externalities.

AB This paper estimates the effects of intranational and international R&D spillovers on the cost and production structure for the Canadian and Japanese manufacturing industries. Domestic spillovers generate greater effects on average variable cost and factor intensities compared to international spillovers between the two countries. Private and social rates of return to R&D are one and one-half to twelve times the private returns. The Canadian social rates of return are generally two to three times higher than the Japanese rates.

Bertola, Giuseppe

PD November 1996. **TI** Institutions and Labour Reallocation. **AU** Bertola, Giuseppe; Rogerson, Richard. **AA** Bertola: Universita di Torino. Rogerson: University of Minnesota. **SR** Centre for Economic Policy Research, Discussion Paper: 1519; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 21. **PR** 4 pounds or $8.00. **JE** J31, J63. **KW** Firing Costs. Wage Compression. Job Turnover.

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.

Bhattacharya, Jay

PD January 1996. **TI** Cause-Specific Mortality Among Medicare Enrollees. **AU** Bhattacharya, Jay; Garber, Alan M.; MaCurdy, Thomas. **AA** Bhattacharya: Stanford University. Garber and MaCurdy: Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5409; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 15. **PR** $5.00. **JE** J11, I11, H53. **KW** Medicare. Mortality Rates. Demographics.

AB Life tables with specific causes of death, particularly when adjusted for demographic and other personal characteristics, can be important components of cost-effectiveness and other economic studies. However, there are few sources of nationally representative information that can be used to develop life tables that incorporate cause-specific mortality. To produce such estimates, the authors relate annual mortality rates to a set of individual characteristics, applying a statistical model with a flexible functional form to data obtained from a random sample of Medicare eligibility and hospital insurance files, covering the years 1986-1990. Insofar as national data sources can be found to compare to the estimates of these models, the results are comparable. For example, the survival figures are comparable to the life table figures supplied as part of the series of vital statistics of the United States.

Bilal, Sanoussi

PD June 1996. **TI** Trade Reforms and the Protection-Seeking Process: A Uniform Distribution Approach. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/17; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 30. **PR** 2 pounds; no charge to students. **JE** D72, F13. **KW** Political Economy. Endogenous Trade. Administered Protection. Lobbying. Institutions.

AB This paper focuses on the possible effects on lobbying effort of a reform of the trade policy decision mechanism. In particular, an elemental evaluation of a two-stage lobbying process to seek administered political protection is proposed, where the uncertainty concerning both the probability and the level of protection to be granted is captured by a simple uniform distribution. The main result is that a tightening of the (administered) trade policy-making process can lead to the seemingly paradoxical outcome of enhancing protection-seeking activities. The reason lies not only in the interaction between stages, but also in the fact that lobbying activities directly affect the level of uncertainty regarding the (partly) endogenous determination of trade policies.

PD June 1996. **TI** Legislative Lobbying and the Supply of Protection. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/18; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 26. **PR** 2 pounds; no charge to students. **JE** D72, F13. **KW** Political Economy. Endogenous Trade. Administered Protection. Legislative Protection. Institutions.

AB Over the last two decades, the increasing recourse to administered protection (mainly antidumping and countervailing duties) has been accompanied by growing pressures from protection-seekers on administered trade remedy laws to satisfy their demand. This can take the form of lobbying activities either to influence administered trade policy decisions, or to redesign trade laws to accommodate protectionist interests (called legislative lobbying). This paper considers the endogenous determination of administered trade rules and investigates the effects on lobbying behavior of a less protection-friendly legislative and administered process (which could be triggered by international constraints or institutional changes, for instance). Contrary to common intuition, the analysis shows that such exogenous tightenings of the protection-seeking process could, under some conditions, induce an increase in lobbying activities.

Blake, David

PD May 1995. **TI** The Demand for Alcohol in the United Kingdom. **AU** Blake, David; Nied, Angelika. **AA** Birkbeck College. **SR** Birkbeck College Discussion Papers in Economics: 9/95; Birkbeck College, Department of Economics, 7/15 Gresse Street, London W1P 2LL, England. **PG** 21. **PR** no charge. **JE** C51, C52, D12. **KW** Alcohol Demand. United Kingdom.

AB Using the AIDS model, we show that there exists for the UK a stable long-run relationship between expenditure shares on beer, cider, spirits and wine, alcohol prices, total alcohol expenditure and a range of non- economic variables relating to advertising, licensing, the employment, social class and demographic characteristics of consumers, and climate. Our estimates of key price and income elasticities generally lie between those found from other time-series studies (which exclude most of these non-economic variables) and those found from cross-section studies (which generally include them). However, the restrictions required for homogeneity and symmetry are decisively rejected.

PD June 1995. **TI** Efficiency, Risk Aversion and Portfolio Insurance: An Analysis of Financial Asset Portfolios Held by Investors in the United Kingdom. **AA** Birkbeck College. **SR** Birkbeck Discussion Paper in Financial Economics: FE/03/95; Birkbeck College, Department of Economics, 7/15 Gresse Street, London W1P 2LL, England. **PG** 18. **PR** no charge. **JE** G11, G13, G22. **KW** Efficient Portfolios. Risk Aversion. Porfolio Insurance. Optimal Portfolio.

AB Using data for the UK, we show that investors in six different financial wealth ranges hold mean-variance efficient portfolios of financial assets. This result permits us to estimate coefficients of relative risk aversion for investors in each of these wealth ranges and to determine whether investors would be willing to pay for portfolio insurance.

PD June 1995. **TI** The Short-Run Performance of Initial Public Offers: New Results Using a Dynamic Beta Model. **AU** Blake, David; Freris, Andrew F. **AA** Blake: Birkbeck College. Freris: Salomon Brothers Hong Kong Ltd. **SR** Birkbeck Discussion Paper in Financial Economics: FE/04/95; Birkbeck College, Department of Economics, 7/15 Gresse Street, London W1P 2LL, England. **PG** 18. **PR** no charge. **JE** G12, G32. **KW** Public Offers. Beta Model. Excess Returns. Pricing Efficiency.

AB This study measures the statistical properties of excess returns during the primary and secondary market trading of initial public share offers. A new algorithm is developed for updating the beta values of the new stocks. We show that earlier studies underestimate the degree of underpricing on a risk-adjusted basis in the primary market, and, consequently, overestimate the excess returns in the secondary market. The outcome of our approach is a set of results somewhat different from earlier studies. Using data from Hong Kong between May 1986 and April 1989, we found that, despite correctly adjusting for risk, there was no statistically significant primary market underpricing of the IPO's if account was not taken of the size of the IPO and the degree of oversubscription. In the secondary market, only the excess return generated during the afternoon session of the first day was statistically significant. Apart from this, secondary excess returns were stationary, while in most cases they were also generated by weakly-determined autoregressive processes with non-normally distributed error terms. Hence there is some evidence of secondary market pricing inefficiency in the case of Hong Kong over this period.

Blanchard, Olivier

PD October 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. Katz: Harvard University.

SR Massachusetts Institute of Technology, Department of Economics Working Paper: 96/29; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 39. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** E24, E30, J60. **KW** Natural Rate. Unemployment. Technological Progress. Phillips Curve. Wage Curve.

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 we assess in this paper. We reach two main conclusions. First, there has been considerable theoretical progress over the past 30 years. A framework has emerged. We present it and show how it can be used to think, for example, about the relations 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. We look at two issues, the relation of wages to unemployment, and the rise of European unemployment.

PD October 1996. **TI** Disorganization. **AU** Blanchard, Olivier; Kremer, Michael. **AA** Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 96/30; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 38. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** E10, E32, P10. **KW** Transition. Eastern Europe. Output Decline. Specificity. Complexity.

AB Under central planning, many firms relied on a single supplier for many of their inputs. Transition has led to decentralized bargaining between suppliers and buyers. Under incomplete contracts or asymmetric information, such bargaining can be inefficient, and the mechanisms that mitigate this problem in the West can only play a limited role in transition. For example, the scope for long-term relations to reduce opportunistic behavior is limited when many existing firms are expected to disappear or change most of their suppliers in the future. The result has been disorganization, and a sharp decrease in output. The empirical evidence suggests that disorganization has played a more important role in the former Soviet Union than in Central Europe.

Blanchflower, David

PD June 1996. **TI** Growing Into Work. **AU** Blanchflower, David; Freeman, R. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 296; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 73. **PR** no charge. **JE** J21, J23, J24. **KW** Youth. Labor Markets. United States.

AB This paper examines youth labor markets in OECD countries in the 1980's and 1990's, when the youth share of the population fell rapidly in most of these countries. Despite the decline in the youth share of the population and increased enrollments in school, and shifts in industry mix toward youth-intensive sectors, the wages of youths relative to adults fell, and the employment rates of youths declined sharply, particularly among men. In many countries, youth suicides rose, crime (committed largely by the young) rose and marriage rates fell among young persons. The paper concludes that the most likely cause for the adverse labor market experiences of youths is the high overall rate of unemployment. Neither changes in demography nor expansion of low wage industries nor reductions in the wages of youth were able to counteract the effects of the macro-economy on the prospects of young workers.

PD October 1996. **TI** The Role and Influence of Trade Unions in the OECD. **AA** Dartmouth College. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 310; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 37. **PR** no charge. **JE** J51. **KW** Trade Unions. Union Density.

AB In this report the role of trade unions in the United States is compared with those in eighteen other OECD countries using micro-data at the level of the individual. The main findings are as follows: (1) The declines in union density experiences in the U.S. in the last thirty years are not typical of the OECD. (2) There are many similarities across countries in who joins unions. (3) The union-nonunion wage differential in the U.S. is approximately 15 percent. Unions in most other countries appear to raise wages by less. (4) Unions reduce total hours of work. The size of the effect appears to be relatively small in the U.S. The paper concludes that the contraction in U.S. union density is driven by what unions do on the wage front. If unions wish to survive they will have to emphasize their collective voice role rather than their monopoly face.

Blomstrom, Magnus

TI Internationalized Production in World Output. **AU** Lipsey, Robert E.; Blomstrom, Magnus; Ramstetter, Eric.

Blonigen, Bruce A.

PD March 1996. **TI** Protectionist Threats and Foreign Direct Investment. **AU** Blonigen, Bruce A.; Feenstra, Robert C. **AA** Blonigen: University of Oregon. Feenstra: University of California, Davis and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5475; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 36. **PR** $5.00. **JE** F13, F14, D72. **KW** Foreign Investment. Protection. Tariffs. Political Economy. Credible Commitment.

AB The recent literature on quid pro quo foreign direct investment (FDI) suggests that FDI may be induced by the threat of protection, and further, that FDI may be used as an instrument to defuse a protectionist threat. This paper uses a panel data se of 4-digit SIC level observations of Japanese manufacturing FDI into the United States in the 1980's to explore these hypotheses empirically. The authors find strong statistical support for the hypothesis that higher threats of protection lead to greater FDI flows, and post-regression simulations find that a rise in the expected probability of protection from five to ten percent means over a 30 percent rise in next-period FDI flows for an average industry. In addition, there is evidence that non-acquisition FDI by the Japanese had success in defusing the threat of an escape clause investigation in future periods.

Boone, P.

PD November 1996. **TI** Political and Gender Oppression as a Cause of Poverty. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 294; Centre for Economic

Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 36. **PR** no charge. **JE** I32, J16. **KW** Poverty. Gender. Oppression. Human Rights.

AB Political regimes and social rules have often served to suppress human rights and freedoms. In this paper I analyze the determinants of oppression when self-interested leaders seek to gain from oppressing a less powerful group. In my framework an oppressive regime is a rational equilibrium outcome and is characterized by distortionary macroeconomic policies, abuse of human rights, and a high incidence of poverty. Oppression ends if the benefits to oppressors decline, or if technological change raises the fighting power of oppressed groups. I use indicators of human rights abuses in 101 countries to examine the empirical determinants of gender, political and ethnic oppression along with the impact of oppression on poverty. I find that oppression declines with income, and that it is highly correlated with religious rules. I also find that oppression is positively correlated with basic poverty indicators. My point estimates imply that shifting from an oppressive equilibrium to a liberal equilibrium could reduce infant mortality rates by up to 87 percent in low income countries. One policy implication is that a system of international incentives and sanctions targeted to end oppression could permanently reduce poverty.

Booth, Alison L.

PD November 1995. **TI** Quitting Externalities With Uncertainty About Future Productivity. **AU** Booth, Alison L.; Zoega, Gylfi. **AA** Booth: University of Essex. Zoega: Birkbeck College. **SR** Birkbeck College Discussion Papers in Economics: 11/95; Birkbeck College, Department of Economics, 7/15 Gresse Street, London W1P 2LL, England. **PG** 19. **PR** no charge. **JE** E32, J23, J24, J41. **KW** Quitting Externalities. Uncertainty. Training Under-Investment.

AB This paper looks at the effect of quitting on the number of workers trained under conditions of uncertainty about future productivity when workers have both firm-specific and industry-specific skills. A new effect is found which works in the opposite direction of the undertraining result of Stevens (1994, 1995): A high quit rate makes investment in training less irreversible in the presence of firing costs and hence also less risky. This effect makes firms start hiring new workers at a lower level of productivity and hire more workers for a given increase in productivity. A rise in the quit rate can now either decrease or increase the number of trained workers.

PD January 1997. **TI** Job Tenure: Does History Matter? **AU** Booth, Alison L.; Francesconi, Marco; Garcia-Serrano, Carlos. **AA** Booth and Francesconi: University of Essex. Garcia-Serrano: Universidad de Alcala de Henares. **SR** Centre for Economic Policy Research Discussion Paper: 1531; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 22. **PR** 4 pounds or $8.00. **JE** J11, J20, J62. **KW** Job Tenure. Job Mobility. Quits. Layoffs.

AB This paper uses the retrospective work history data from the British Household Panel Survey to examine patterns of job mobility and job tenure for men and women over the twentieth century. British men and women hold an average of five jobs over their lifetimes, and one-half of all lifetime job changes occur in the first ten years. For both men and women, the separation hazard is increasing in the first few months of a job, and declines thereafter. History is found to affect job tenure in two important respects. Individuals entering the labor market earlier in the twentieth century are characterized by different tenure patterns than later cohorts: job tenure is typically longer for earlier cohorts, and there are more pronounced gender differences. Individual history also matters: job accumulation is associated with longer job tenure and, as jobs accumulate, women are more likely to shift into part-time employment while men are more likely to shift into self-employment.

Borenstein, Severin

PD February 1996. **TI** Sticky Prices, Inventories, and Market Power in Wholesale Gasoline Markets. **AU** Borenstein, Severin; Shepard, Andrea. **AA** Borenstein: University of California Energy Institute and National Bureau of Economic Research. Shepard: Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5468; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** $5.00. **JE** E31, L13, L71. **KW** Oligopoly. Imperfect Competition. Gasoline. Sticky Prices.

AB The authors present and test an explanation for lags in the adjustment of wholesale gasoline prices to changes in crude oil prices. Our simple model with costly adjustment of production and inventories implies that output prices will respond with a lag to cost shocks even in the absence of menu costs, imperfect information, and long-term buyer/seller relationships. The model predicts that futures prices for gasoline will adjust incompletely to crude oil price shocks occurring close to the expiration date of the futures contract. The authors test and confirm this implication. The model also predicts that firms with market power will choose a different price adjustment path than would perfectly competitive firms. The authors examine the responses of prices in 188 local wholesale gasoline markets and find evidence that greater market power leads to slower output price adjustment.

Borjas, George J.

PD February 1996. **TI** Searching for the Effect of Immigration on the Labor Market. **AU** Borjas, George J.; Freeman, Richard B.; Katz, Lawrence F. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5454; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 8. **PR** $5.00. **JE** J61, J31, D31. **KW** Immigration. Inequality. Education.

AB The authors compare two approaches to analyzing the effects of immigration on the labor market and find that the estimated effect of immigration on U.S. native labor outcomes depends critically on the empirical experiment used. Area analyses contrast the level or change in immigration by area with the level or change in the outcomes of non- immigrant workers. Factor proportions analyses treat immigrants as a source of increased national supply of workers of the relevant skill. Cross-section comparisons of wages and immigration yield unstable results casting doubt on the validity of these calculations. Factor proportions calculations show that immigration was somewhat important in reducing the relative pay of U.S. high school dropouts during the 1980's, while immigration and trade continued much more modestly to the falling pay of high school equivalent workers.

Bound, John

TI On the Validity of Using Census Geocode Characteristics to Proxy Individual Socioeconomic Characteristics. **AU** Geronimus, Arline T.; Bound, John; Neidert, Lisa J.

Bowlus, Audra J.

PD December 1995. **TI** Fitting Equilibrium Search Models to Labor Market Data. **AU** Bowlus, Audra J.; Kiefer, Nicholas; Neumann, George. **AA** Bowlus: University of Western Ontario. Kiefer: University of Aarhus and Cornell University. Neumann: University of Iowa. **SR** University of Western Ontario Department of Economics Research Reports: RR/9601; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. **PG** 29. **PR** $10.00. **JE** D83, J64. **KW** Equilibrium Search Models. Labor Market. Wage Policy. Dynamic Monopsony Models.

AB The essential idea of equilibrium search models of labor market behavior is that wage policy matters. In contrast, the stylized neoclassical competitive model predicts that firms paying a wage above the competitive equilibrium will disappear; those offering less will attract no workers. The search approach introduces "friction" via information asymmetries. Because equilibrium search models provide a natural interpretation of interesting labor market phenomena, the estimation of such models has attracted considerable attention. In this paper, we provide methods for estimating equilibrium search models using a non-parametric estimator of heterogeneity. We describe the search model due to Mortensen (1990) and Burdett and Mortensen (1995) and we develop the likelihood function appropriate to data generated by this model. For the case we consider, namely a discrete number of firm types having different productivity levels, the estimation problem is non- standard, and the likelihood function is not differentiable. We characterize the MLE for this problem and provide a means of computing it. We also present a Monte Carlo study of the properties of the estimators using all the data from the search model and apply this technology to labor market transitions for young males using the National Longitudinal Survey of Youth (NLSY).

PD August 1996. **TI** Generation X, Search Theory, and the U.S. -- Canadian Unemployment Rate and Wage Inequality Gaps During the 1980's. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Report: RR/9614; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. **PG** 32. **PR** $10.00. **JE** D83, J31, J64. **KW** General Equilibrium Search Model. Wage Inequality. Labor Market.

AB During the mid 1980's young, low-skilled adults in Canada were much more likely to be out of work than their U.S. counterparts. The unemployment rate gap for this cohort was 7 percentage points. At the same time wage inequality was higher in the U.S. Using panel data from the U.S. Longitudinal Survey of Youth and the Canadian Labor Market Activity Survey, this study employs a general equilibrium search model of the labor market to identify structural differences contributing to these gaps. The results reveal both gaps are driven by a higher job destruction/separation rate in Canada and higher job offer arrival rates in the U.S. In general, the model characterizes the U.S. labor market as more "competitive" than Canada's.

Boyd, Derick

PD September 1995. **TI** Testing for Stationarity of the Real Exchange Rate in Developing Countries. **AU** Boyd, Derick; Smith, Ron. **AA** Boyd: University of East London. Smith: University of London. **SR** Birkbeck College Discussion Papers in Economics: 10/95; Birkbeck College, Department of Economics, 7/15 Gresse Street, London W1P 2LL, England. **PG** 9. **PR** no charge. **JE** C23, C32, F31. **KW** Cointegration. Purchasing Power Parity. Unit Roots.

AB This paper examines the evidence for Purchasing Power Parity (PPP) for a panel of 31 developing countries 1966-1990. While these data show the standard result that in only four cases does the Augmented Dickey-Fuller test reject non-stationarity, all but four countries show some evidence for PPP when a more general model which allows for flexible dynamics and measurement error is used. The general to specific methodology adopted also allows us to identify exactly which features of the specification lead to rejection of PPP.

Brander, James A.

PD March 1996. **TI** Open Access Renewable Resources: Trade and Trade Policy in a Two- Country Model. **AU** Brander, James A.; Taylor, M. Scott. **AA** University of British Columbia and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5474; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** $5.00. **JE** F12, F13, Q28. **KW** Renewable Resources. Tariffs. Welfare. Trade.

AB This paper develops a two-good, two-country model with national open access renewable resources. The authors derive an appropriate analog of "factor proportions" for the renewable resource case and link it to trade patterns and to the likelihood of diversified production. The resource importer gains from trade. However, a diversified resource exporting country necessarily suffers a decline in steady state utility resulting from trade, and may lose along the entire transition path. Thus the basic "gains from trade" presumption is substantially undermined by open access resources. Tariffs imposed by the resource importing country always benefit the resource exporter, and may be pareto-improving.

Brennan, Geoffrey

PD July 1996. **TI** Two Theories of Rational Voting. **AU** Brennan, Geoffrey; Hamlin, Alan. **AA** Brennan: Australian National University. Hamlin: University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9632; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 28. **PR** no charge. **JE** D72. **KW** Voting. Voter Participation. Instrumental Theory. Expressive Theory.

AB There are currently two rival accounts of rational voting in the political economy/public choice tradition: The mainstream instrumental account, that sees the vote as statement of preference over possible electoral outcomes, essentially analogous to market; and the expressive account, that sees the vote as expressing support for one or other electoral options, rather like cheering at a football match. The two accounts offer very different views of the domain of politics. This paper attempts to lay out the implications of these rival accounts for the issue of who votes (assuming voluntary voting) as well as for the nature of political equilibrium. For the one-dimensional case, we show that, in the instrumental model, the famous median voter result is in general incorrect. In the multi-dimensional case, the cycling normally associated with the instrumental model is somewhat limited by the endogeneity of the decision to vote, and the expressive model generates a locally stable political equilibrium. In the instrumental case, non- voting is driven by voter indifference; in the expressive case, non- voting is driven by voter alienation. A test to distinguish between the two models is therefore available by reference to the composition and motivation of the set of non-voters.

Brown, Donna

PD February 1997. **TI** The Price is Right: Inflation and Nominal Wage Adjustment in Britain. **AU** Brown, Donna; Ingram, Peter; Wadsworth, Jonathan. **AA** Brown: London School of Economics. Ingram: University of Surrey and London School of Economics. Wadsworth: London School of Economics and Royal Holloway College. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 326; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 29. **PR** no charge. **JE** E31, J30, J50. **KW** Pay. Inflation. Employment.

AB How much changed regarding the wage-employment relationship in Britain between 1979 and 1994, as the government tried to encourage greater wage and employment flexibility? This paper uses settlement group wage contract data to track the evolution of nominal wage settlements over time and examines the impact that inflation has on these outcomes. We show that disaggregated wage determination is consistent with a continuing disdain for nominal wage cuts on the part of both employees and employers. Paradoxically, price inflation, rather than institutional reform of the labor market may have done more to promote real wage adjustment across establishments in Britain. During periods of high inflation, the distribution of manufacturing real wage settlements shifts to the left, resulting in an increase in the number of settlement groups who experience real wage cuts. High levels of inflation appear to be associated with lower real wage increases for a given shock. The correlation between real wages and subsequent employment adjustment appears to be very weak.

TI Free to Choose? Dimensions of Private Sector Wage Contract Re- Negotiation Since 1979. **AU** Ingram, Peter; Wadsworth, Jonathan; Brown, Donna.

Bruno, Michael

PD February 1996. **TI** Inflation's Children: Tales of Crises that Beget Reforms. **AU** Bruno, Michael; Easterly, William. **AA** The World Bank and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5452; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 6. **PR** $5.00. **JE** E52, E31, D78. **KW** Inflation. Political Economy. Reform. Monetary Policy.

AB Are broad reforms the children of high inflation? Do growth recoveries follow? The authors find that countries that had external debt crises with high inflation both reformed more and recovered better than countries that had external debt crises with low inflation. Countries with extremely high inflation also later wound up with lower inflation than countries that has moderately high inflation. The low inflation debtor countries had more aid than the high inflation debtor countries, which may have created stronger incentives to reform in the high inflation countries. Recent reforms look like they are the children of high inflation, even if further paternity tests are in order.

Buchinsky, Moshe

PD February 1996. **TI** Wage Mobility in the United States. **AU** Buchinsky, Moshe; Hunt, Jennifer. **AA** Buchinsky: Yale University and National Bureau of Economic Research. Hunt: Yale University. **SR** National Bureau of Economic Research Working Paper: 5455; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** $5.00. **JE** J61, D31, C14. **KW** Inequality. Wages. Earnings. Mobility.

AB This paper examines the mobility of individuals through the wage and earnings distributions. This is of extreme importance since mobility has a direct implication for the way one views the vast changes in wage and earnings inequality in the United States over the last few decades. The measures of wage and earnings mobility analyzed are based on data for individuals surveyed in the National Longitudinal Survey of Youth from 1979 to 1991. The results suggest that mobility is predominantly within group mobility and increases most rapidly when the time horizon is extended up to four years, reducing wage inequality by 12-26 percent. The authors proceed therefore with more detailed examination of short-term (year-to-year) within group mobility, by estimating non-parametrically transition probabilities among quintiles of the distribution. The authors find that the staying probabilities, by quintiles, were higher at the higher quintiles throughout the period for both wages and earnings, and that mobility is declining over time.

TI On the Number of Bootstrap Repetitions for Bootstrap Standard Error Estimates. **AU** Andrews, Donald W. K.; Buchinsky, Moshe.

Bughin, Jacques

PD December 1996. **TI** To be (Unionized) or Not to be? A Case for Cost-Raising Strategies. **AU** Bughin, Jacques; Vannini, Stefano. **AA** Bughin: McKinsey & Co. and Universite Libre de Bruxelles. Vannini: Universitat Wien. **SR** Centre for Economic Policy Research, Discussion Paper: 1527; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 16. **PR** 4 pounds or $8.00. **JE** J51, L20. **KW** Cost-Raising Strategies. Union-Firm Bargaining. Union Power. Bargaining.

AB This paper analyses the decision by a firm over whether or not to recognize unions (and therefore enter the bargaining process) in order to gain market power in unionized markets. We show that union power coupled with the nature of the union-firm bargaining process -- i.e. scope and structure -- are key determinants of a firm's choice to be unionized and to strategically adopt cost-raising strategies.

Buiter, Willem H.

PD December 1996. **TI** Aspects of Fiscal Performance in Some Transition Economies Under Fund-Supported Programs. **AA** University of Cambridge. **SR** Centre for Economic

Policy Research Discussion Paper: 1535; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 39. **PR** 4 pounds or $8.00. **JE** E58, E62, F34, O57, P27. **KW** Transition Economies. Fiscal Policy. Monetary Policy. International Fund.

AB This paper contains a selective review of some of the key fiscal issues faced by transition economies. The twelve countries that provide the empirical background for this study have all been under Fund programs for at least some of the time since they initiated their transitions from plan to market. The focus of the paper is on medium- and long-term fiscal issues, such as government solvency and the evaluation of the sustainability of the government's fiscal-financial- monetary program. The purpose of the paper is to assist the design and implementation of future Fund programs and to improve the quality of the debate about the design and conduct of fiscal policy in transition economies generally. The outline of the paper is as follows. Following the introduction, which contains a brief discussion of the roles of the Fund, Section II sets out a framework for evaluating the sustainability of the fiscal-financial-monetary program of the state. Section III contains some numerical material on public debt, deficits (including quasi-fiscal deficits) and monetary financing or seigniorage. Section IV discusses eight specific budgetary issues I consider to be of special relevance to transition economies. Section V concludes by summarizing the lessons from this study.

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. Lago: European Bank for Reconstruction and Development. Rey: London School of Economics. **SR** Centre for Economic Policy Research Discussion Paper: 1548; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 31. **PR** 4 pounds or $8.00. **JE** DE44, F21, F41, G11, G24. **KW** Transition Economies. Enterprise Performance. Portfolio Choice. Provisioning. Macroeconomic Environment.

AB This paper takes a systematic look at the portfolio choice problem faced by investment banks or funds investing in transition economies. We 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 we 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. We evaluate the attractiveness of alternative investment strategies and provisioning rules from the perspective of portfolio theory.

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: Cambridge University. Lago: European Bank for Reconstruction and Development. Rey: London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 320; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 31. **PR** no charge. **JE** G11, G15. **KW** Transition Economies. Portfolio Choice.

AB See abstract for Buiter, Willem H., Ricardo Lago and Helene Rey, January 1997. "A Portfolio Approach to a Cross-Sectoral and Cross-National Investment Strategy in Transition Economies". Centre for Economic Policy Research Discussion Paper: 1548; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom.

PD January 1997. **TI** Interpreting the ERM Crisis: Country-Specific and Systemic Issues. **AU** Buiter, Willem H.; Corsetti, Giancarlo; Pesenti, Paolo. **AA** Buiter: Cambridge University. Corsetti: University of Rome III. Pesenti: London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 321; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 49. **PR** no charge. **JE** E52, E61, F32, F33. **KW** Exchange Rate Mechanism. Crisis. Monetary Policy. Exchange Rates.

AB Most interpretations of the Exchange Rate Mechanism crisis in 1992-93 ignore the key role played by structural policy spillovers among European countries, and overlook the effects of coordination (or lack thereof) of monetary and exchange rate policies among the countries making up the periphery of the system. This paper provides a simple analytical framework, able to encompass the recent literature on currency crises, while developing it by bringing out the decisive role of the strategic interactions among national policy makers in multi-country monetary and exchange rate game. In contrast to an approach that focuses exclusively on country-specific issues, a systemic view is ultimately able to unravel more coherently, and more convincingly, the "puzzles" of the ERM crisis.

PD March 1997. **TI** Aspects of Fiscal Performance in Some Transition Economies Under Fund-Supported Programs. **AA** University of Cambridge and London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 333; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 64. **PR** no charge. **JE** E41, E58, E62, F34, P27. **KW** Transition Economies. Fiscal Policy. Monetary Policy. International Monetary Fund.

AB See abstract for Buiter, Willem H., December 1996. "Aspects of Fiscal Performance in Some Transition Economies Under Fund-Supported Programs". Centre for Economic Policy Research Discussion Paper: 1535; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom.

PD March 1997. **TI** Promoting an Effective Market Economy in a Changing World. **AU** Buiter, Willem H.; Lago, Ricardo; Stern, N. **AA** Buiter: University of Cambridge. Lago: European Bank for Reconstruction and Development. Stern: European Bank of Reconstruction and Development and London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 335; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 87. **PR** no charge. **JE** F32, F41, H11, H41. **KW** Transition Economies. Role of Government.

AB In this paper we examine the main challenges in promoting an effective market economy. While the paper ranges widely across the spectrum of economic institutions and policies, the central theme is the importance of macroeconomic stability for economic growth in the medium and long run. Macroeconomic stability may be seen as a pubic good. Its provision is among the essential responsibilities of the state both in modern market economies and in economies transforming themselves into modern market economies. Following this brief introduction, Section II considers four key aspects of the economic environment of the coming decades: increasing internationalization; market-orientation; diminished government role; high real interest rates. Section III reviews the reasons why macroeconomic stability matters for economic performance and summarizes the key empirical evidence supporting the existence of a causal link. Section IV deals with the design of domestic and international policies and institutions to promote macroeconomic stability and Section V asks how national governments and international institutions can take advantage of the current relatively stable global macroeconomic environment to improve medium-term economic performance and promote long-term growth. Section VI concludes.

Bulow, Jeremy

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

Burchell, Brendan

PD August 1996. **TI** Trust, Business Relationships and the Contractual Environment. **AU** Burchell, Brendan; Wilkinson, Frank. **AA** University of Cambridge. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP35; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 23. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** D23, L14. **KW** Trust. Contracting. Legal Systems. Business Relationships.

AB The role of trust in vertical contracting relationships between firms in Britain, Germany and Italy is investigated with a survey of 60 firms. After a review of the literature in which the nature of trust is discussed and set against a background of social norms and legal systems, data are presented to describe respondents' perceptions of the role of trust in their trading environment, their strategies to foster trust and their reactions to the breakdown of trust. Whilst there was some evidence of differences in the basis of trust between countries, the similarities were more pronounced than the differences.

Burridge, Peter

TI Unit Root Tests in the Presence of Uncertainty About the Non- Stochastic Trend. **AU** Ayat, Leila; Burridge, Peter.

Butler, Alison

PD September 1994. **TI** Product Cycles, Innovation and Relative Wages in European Countries. **AU** Butler, Alison; Dueker, Michael. **AA** Butler: George Washington University. Dueker: Federal Reserve Bank of St. Louis. **SR** Federal Reserve Bank of St. Louis Working Paper: 94/022B; Research Division, Working Papers, Federal Reserve Bank of St. Louis, P.O. Box 442, St. Louis, MO 63166. Website: www.stls.frb.org. **PG** 35. **PR** no charge. **JE** F10, J31, O31. **KW** Relative Wages. Innovation. Product Cycles. Patents.

AB This paper attempted to bridge the gap between the theoretical literature examining how innovation affects income across countries and the empirical literature examining how relative wages within a country change over time. We test the hypothesis that the relative wage between workers in high- and low-technology industries within a country is a function of the rate of domestic innovation and innovation abroad. To test this hypothesis data for 7 European countries for the years 1971-1988 are used. The empirical results show that the relative rates of innovation (as measured by the ratio of patents to high-tech workers) are significant determinants of the relative wage.

Caballero, Ricardo J.

PD February 1996. **TI** The "Fundamental Transformation" in Macroeconomics. **AU** Caballero, Ricardo J.; Hammour, Mohamad L. **AA** Caballero: Massachusetts Institute of Technology and National Bureau of Economic Research. Hammour: Capital Guidance. **SR** National Bureau of Economic Research Working Paper: 5471; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 11. **PR** $5.00. **JE** E12, E13, E22, E23. **KW** Factor Specificity. Bilateral Monopoly. Sticky Prices.

AB When factors enter into joint-production, they typically develop a degree of specificity with respect to each other. It is well known that, when combined with contracting difficulties, specificity gives rise to a Williamsonian "Fundamental Transformation" from an ex-ante competitive relationship to an ex-post bilateral monopoly. The macroeconomic consequences of widespread specificity are far-reaching. Specificity results in misallocation, underutilization, and unemployment of the economy's productive factors; it hampers growth by depressing the incentives to replace what is outdated and to fully utilize the economy's resources; it disrupts macroeconomic adjustment by inducing a wedge between timid creation and excessive destruction of the old system; and it exacerbates downturns by "elastifying" the cyclical response of inelastic factors.

PD August 1996. **TI** The Macroeconomics of Specificity. **AU** Caballero, Ricardo J.; Hammour, Mohamad L. **AA** Caballero: Massachusetts Institute of Technology and National Bureau of Economic Research. Hammour: Capital Guidance. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 96/25; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 49. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** D52, E10, O10. **KW** Rent Appropriation. Quasi-Rents. Capital-Labor Substitution.

AB Specific quasi-rents build up in a wide variety of economic relationships, and are exposed to opportunism unless fully protected by contract. The recognition that such contracts are often incomplete has yielded major insights into the organization of microeconomic exchange. Rent appropriation, we argue, also has important macroeconomic implications. Resources are underutilized, factor markets are segmented, production suffers from technological "sclerosis," job destruction is out of balance with creation, recessions are excessively sharp, and expansions run into bottlenecks. While, depending on the nature of the shock, expansions may require reinforcement or stabilization, recessions should always be softened. In the long run, institutions, such as those governing capital-labor relations, may evolve to alleviate the problem by balancing appropriation. Technology choice will also be affected, with the appropriated factor partially "excluding" the other from production to reduce appropriation -- as manifested in the role capital- labor substitution played in the rise of

European unemployment.

Calomiris, Charles W.

PD January 1996. **TI** The Efficiency of Self-Regulated Payments Systems: Learning from the Suffolk System. **AU** Calomiris, Charles W.; Kahn, Charles. **AA** University of Illinois at Urbana-Champaign and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5442; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 34. **PR** $5.00. **JE** N21, K22, G21. **KW** Banks. Check Clearing. Regulation. Boston. New York.

AB This paper analyzes the Suffolk System, an interbank note-clearing network operating in New England from the 1820's through the 1850's. Some observers emphasized the stability and efficiency of these arrangements. Others argued that the arrangements were motivated by rent-seeking on the part of Boston banks, and were primarily coercive and exploitative. In the neighboring Mid-Atlantic states, regulations limited the potential for developing a regional clearing system centered in New York City on the model of the Suffolk System. This difference makes it possible to compare the performance of banks across regulatory regimes. Evidence supports the sanguine view: New England's banks were able to issue more notes and these notes traded at uniform and low discount rates compared to those of other banks. The stock market perceived that bank lending produced less risk for bank debt holders in Boston than in New York. There is no evidence that Boston banks extracted rents from their control of the payments system.

Card, David

PD February 1996. **TI** Labor Market Effects of School Quality: Theory and Evidence. **AU** Card, David; Krueger, Alan B. **AA** Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5450; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 47. **PR** $5.00. **JE** I21, J24, J31, J15. **KW** Race. School Quality. Education. Earnings. Wages.

AB This paper presents an overview and interpretation of the literature relating school quality to students' subsequent labor market success. The authors begin with a simple theoretical model that describes the determination of schooling and earnings with varying school quality. A key insight of the model is that changes in school quality may affect the characteristics of individuals who choose each level of schooling, imparting a potential selection bias to comparisons of earnings conditional on education. The authors then summarize the literature that relates school resources to students' earnings and educational attainment. A variety of evidence suggests that students who were educated in schools with more resources tend to earn more and have higher schooling. The authors also discuss two important issues in the literature: the tradeoffs involved in using school-level versus more aggregated (district or state-level) quality measures; and the evidence on school quality effects for African Americans educated in the segregated school systems of the South.

Carey, Kevin

TI Nominal Wage Stickiness and Aggregate Supply in the Great Depression. **AU** Bernanke, Ben S.; Carey, Kevin.

Carson, Richard

PD July 1996. **TI** Temporal Reliability of Estimates from Contingent Valuation. **AU** Carson, Richard; Hanemann, Michael; Kopp, Raymond; Krosnick, Jon; Mitchell, Robert; Presser, Stanley; Ruud, Paul; Smith, Kerry; Conaway, Michael; Martin, Kerry. **AA** Carson: University of California, San Diego. Hanemann: University of California, Berkeley. Kopp: Resources for the Future. Krosnick: Ohio State University. Mitchell: Clark University. Presser: University of Maryland. Ruud: University of California, Berkeley. Smith: Duke University and University Fellow. Conaway and Martin: Natural Resource Damage Assessment. **SR** Duke University, Department of Economics, Working Paper: 95/05; available only on web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 17. **PR** no charge. **JE** D61, K32, Q28. **KW** Contingent Valuation. Natural Resource Damages. Passive use. Exxon Valdez. Reliability.

AB In 1992 the National Oceanic and Atmospheric Administration convened a panel of prominent social scientists to assess the reliability of natural resource damage estimates derived from contingent valuation (CV). The product of the panel's deliberations was a report that laid out a set of recommended guidelines for CV survey design, administration, and data analysis. This paper focuses on one of these guidelines -- the Panel's call for the "temporal averaging" of willingness-to-pay responses obtained from CV surveys as one method for increasing their reliability. The panel suggested: "Time dependent measurement noise should be reduced by averaging across independently drawn samples taken at different points in time. A clear and substantial time trend in the responses would cast doubt on the 'reliability' of the finding." The purpose of this paper is to examine the temporal reliability of CV estimates. Our findings, using a CV instrument designed to measure willingness-to-pay a program to protect Prince William Sound, Alaska from future oil spills, like the Exxon Valdez spill, exhibited no significant sensitivity to the timing of the interviews. For two samples involving independent interviews taken over two years apart, the distribution of respondents' choices "for" and "against" the protection program did not differ.

Cesaratto, Sergio

PD September 1996. **TI** The Economic Consequences of Innovations in Italian Manufacturing Firms: Theory and Results from the Community Innovation Survey. **AU** Cesaratto, Sergio; Stirati, Antonella. **AA** Cesaratto: University of Roma La Sapienza. Stirati: University of Siena. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP40; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 22. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** O31, O32, L11, L60. **KW** Innovation. Small Firms. Exporting. Employment.

AB The first part of the paper discusses alternative approaches to the macroeconomic impact of innovations introduced at the firm level. On this basis, the second part investigates the economic performance of about 6,000 Italian innovating firms participating in the European Community's Harmonised Innovation Survey. The results underline the promising performance of the small firms sector, and the importance of innovations from the viewpoint of exports.

Chalkley, Martin

PD September 1996. **TI** Contracts for the National Health Service. **AU** Chalkley, Martin; Malcomson, James M. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9641; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 11. **PR** no charge. **JE** I11. **KW** National Health Service. Health Contracts. Service Quality.

AB This paper reviews the implications of the economic theory of contracts for contracting in the National Health Service (NHS), focusing on contracts to maintain quality standards while keeping costs down. It first discusses the particular characteristics of the NHS that are important for contracting, including the restriction on contracts to one year duration. The appropriate form for such short term contracts, including the role of cost sharing and mechanisms to ensure quality, are discussed. The paper then considers the roles for long term contracts and the reputations of providers. It ends with a discussion of policy implications.

Chandra, Naveen

TI The Information Content of Financial Aggregates in Australia. **AU** Tallman, Ellis W.; Chandra, Naveen.

Chao, John C.

PD November 1996. **TI** Bayesian Posterior Distributions in Limited Information Analysis of the Simultaneous Equations Model Using the Jeffreys' Prior. **AU** Chao, John C.; Phillips, Peter C. B. **AA** Chao: University of Maryland. Phillips: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1137; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 34. **PR** no charge. **JE** C30. **KW** Cauchy Tails. Jeffreys Prior. Reduced Form. Simultaneous Equations.

AB This paper studies the use of the Jeffreys' prior in Bayesian analysis of the simultaneous equations model (SEM). Exact representations are obtained for the posterior density of the structural coefficient beta in canonical SEM's with two endogenous variables. For the general case with m endogenous variables and an unknown covariance matrix, the Laplace approximation is used to derive an analytic formula for the same posterior density. Both the exact and the approximate formulas we derive are found to exhibit Cauchy-like tails analogous to comparable results in the classical literature on LIML estimation. Moreover, in the special case of a two-equation, just-identified SEM in canonical form, the posterior density of beta is shown to have the same infinite series representation as the density of the finite sample distribution of the corresponding LIML estimator. This paper also examines the occurrence of a nonintegrable asymptotic cusp in the posterior distribution of the reduced form parameter pi, first documented in Kleibergen and van Dijk (1994). This phenomenon is explained in terms of the jacobian of the mapping from the structural model to the reduced form. This interpretation assists in understanding the success of the Jeffreys' prior in resolving this problem.

Chari, V. V.

PD January 1996. **TI** The Poverty of Nations: A Quantitative Exploration. **AU** Chari, V. V.; Kehoe, Patrick J.; McGrattan, Ellen R. **AA** Chari: University of Minnesota. Kehoe: University of Pennsylvania and National Bureau of Economic Research. McGrattan: Federal Reserve Bank of Minneapolis. **SR** National Bureau of Economic Research Working Paper: 5414; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** $5.00. **JE** O41, O11, E22, F02. **KW** Growth. Convergence. Investment.

AB The authors document regularities in the distribution of relative incomes and patterns of investment in countries and over time. The authors develop a quantitative version of the neoclassical growth model with a broad measure of capital in which investment decisions are affected by distortions. These distortions follow a stochastic process which is common to all countries. Our model generates a panel of outcomes which the authors compare to the data. In both the model and the data, there is greater mobility in relative incomes in the middle of the income distribution than at the extremes. The 10 fastest growing countries and the 10 slowest growing countries in the model have growth rates and investment-output ratios similar to those in the data. In both the model and the data, the "miracle" countries have nonmonotonic investment-output ratios over time. The main quantitative discrepancy between the model and the data is that there is more persistence in growth rates of relative incomes in the model that in the data.

Chatterjee, Shampa

PD January 1997. **TI** Depoliticising Public Sector Enterprises. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 97/02; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 24. **PR** 2 pounds; no charge to students. **JE** L33. **KW** Privatization. Public Enterprise.

AB This paper aims at explaining a few of the stylized facts that have been observed in the context of proposed privatization of the Indian Iron and Steel Company. The enhancement of economic efficiency, in terms of employment, that can be obtained by depoliticizing a public sector unit has been discussed in detail with the help of economic models. The purpose of this paper is to explore the economic benefits arising from the privatization of public enterprises which follow policies that benefit the politician rather than the efficiency of the enterprise. The main conclusion that can be drawn from this paper is that a politician will only consider privatization of an inefficient public sector enterprise if his political gains fall short of the cost of excess employment.

Che, Yeon-Koo

PD October 1996. **TI** Contract Damages and Cooperative Investments. **AU** Che, Yeon-Koo; Chung, Tai-Yeong. **AA** Che: University of Wisconsin-Madison and Yale University. Chung: University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Report: RR/9612; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. **PG** 39. **PR** $10.00. **JE** C70, K12. **KW** Contract Damages. Cooperative Investments.

AB This paper studies the effectiveness of alternative contract damages in inducing cooperative investments -- specific investments that generate a direct benefit to the investor's trading partner. We find that, both with and without the possibility of ex post renegotiation, (i) the standard remedy for breach of contracts awarding expectation damages performs poorly in the presence of cooperative investments, (ii) the privately stipulated damages can achieve a better, albeit inefficient, outcome, and (iii) the reliance damages rule performs the best, achieving the fully efficient outcome in the presence of ex post renegotiation. These rankings stand in stark contrast to those found in the existing literature but explain such practices as termination for convenience, investment subsidies, and cost-based reimbursement, often employed in government contracts.

Chen, Paul

PD November 1996. **TI** Gender Wage Differentials in Performance Pay and Time Wages. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 313; Department of Economics, The Faculties, Australian National University, Canberra ACT 0200, Australia. **PG** 7. **PR** no charge. **JE** J16, J33, J71. **KW** Gender. Wage Differentials. Performance Pay. Time Wages.

AB Using data for Swedish production workers, we find that the unexplained component of the gender wage gap is no larger for performance-related pay than for straight time wages suggesting that performance pay is no more discriminatory than time wages.

PD November 1996. **TI** Efficiency Wages and Industry Wages Differentials: A Comparison Across Methods of Pay. **AU** Chen, Paul; Edin, Per-Anders. **AA** Chen: Australian National University. Edin: Uppsala University. **SR** Australian National University Working Paper in Economics and Econometrics: 314; Department of Economics, The Faculties, Australian National University, Canberra ACT 0200, Australia. **PG** 19. **PR** no charge. **JE** J31, J33, J41. **KW** Efficiency Wages. Wage Differentials. Methods of Pay.

AB Efficiency wage considerations should be less important for piece- rate pay relative to time wages. Therefore, if industry wage differentials reflect efficiency wage factors, then these pay differences should be less sizable and have less explanatory power for piecework than for timework. We test this proposition using wage data for male production workers employed in the Swedish metalworking industries in 1985. The data is partitioned into two groups of workers. In our preferred subsample of workers who received pay under both piece- rates and time wages, our results are uniformly consistent with efficiency wage implications for industry wage differentials. For the subsample of workers who received pay under either piece-rates or time wages, industry wage differentials are of equal importance under either pay scheme. These latter results, however, may also be influenced by unaccounted for sorting of workers and employers across method of pay. Overall, our examination of industry wage differentials across methods of pay provides qualified support for efficiency wage theory.

Christiano, Lawrence J.

PD March 1995. **TI** Small Sample Properties of GMM for Business Cycle Analysis. **AU** Christiano, Lawrence J.; den Haan, Wouter J. **AA** Christiano: Northwestern University and National Bureau of Economic Research. den haan: University of California, San Diego. **SR** National Bureau of Economic Research Technical Paper: 177; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C22, C51, E32. **KW** Geralized Method-of-Moments. Monte Carlo. Small Sample. Business Cycles. Hodrick-Prescott Filters.

AB We investigate, by Monte Carlo methods, the finite sample of properties of GMM procedures for conducting inference about statistics that are of interest in the business cycle literature. These statistics include the second moments of data filtered using the first difference and Hodrick-Prescott filters, and they include statistics for evaluating model fit. Our results indicate that, for the procedures considered, the existing asymptotic theory is not a good guide in a sample the size of quarterly postwar U.S. data.

PD December 1996. **TI** Sticky Price and Limited Participation Models of Money: A Comparison. **AU** Christiano, Lawrence J.; Eichenbaum, Martin; Evans, Charles L. **AA** Christiano: Federal Reserve Bank of Chicago and Minneapolis. Eichenbaum: Northwestern University, Federal Reserve Bank of Chicago and National Bureau of Economic Research. Evans: Federal Reserve Bank of Chicago. **SR** Federal Reserve Bank of Minneapolis Staff Report: 227; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http:\Res.MPLS.FRS.Fed.USResearchRes.HTML. **PG** 68. **PR** no charge. **JE** C32, E30, E40, E52. **KW** Sticky Prices. Limited Participation. Money Stock. Equilibrium.

AB We provide new evidence that models of the monetary transmission mechanism should be consistent with at least the following facts. After a contractionary monetary policy shock, the aggregate price level responds very little, aggregate output falls, interest rates initially rise, real wages decline by a modest amount, and profits fall. We compare the ability of sticky price and limited participation models with frictionless labor markets to account for these facts. The key failing of sticky price models lies in its counterfactual implications for profits. The limited participation model can account for all the above facts, but only if one is willing to assume a high labor supply elasticity (2 percent) and a high markup (40 percent). The shortcomings of both models reflect the absence of labor market frictions, such as wage contracts or factor hoarding, which dampen movements in the marginal cost of production after a monetary policy shock.

Chung, Tai-Yeong

TI Contract Damages and Cooperative Investments. **AU** Che, Yeon-Koo; Chung, Tai-Yeong.

Coakley, Jerry

PD June 1995. **TI** Current Account Solvency and the Feldstein-Horioka Puzzle. **AU** Coakley, Jerry; Kulasi, Farida; Smith, Ron. **AA** Smith: Birkbeck College. Coakley and Kulasi: London Guidilall University. **SR** Birkbeck College Discussion Paper in Economics: 8/95; Birkbeck College, Department of Economics, 7/15 Gresse Street, London W1P 2LL, England. **PG** 11. **PR** no charge. **JE** C50, E20, F20. **KW** Feldstein-Horioka Result. Capital Mobility. Solvency Constraints. Cointegration.

AB In this paper we suggest an alternative explanation of the high cross- section association between shares of saving and investment in GDP which Feldstein-Horioka (FH) (1980) interpret as evidence of low capital mobility. In OECD countries, saving and investment shares appear to be I(1). We show that a solvency constraint implies that the current balance is stationary and thus that saving and investment cointegrate with a unit coefficient irrespective of the degree of capital mobility. It is this long run relation that the FH cross-section regression captures. Econometric results for 23 OECD countries over the 1960-92 period are consistent with this explanation. Unit root tests for heterogenous panels provide strong evidence that current balances are stationary and that the current balance acts as an error correction mechanism on investment as implied by the solvency constraint.

Cockburn, Iain

TI Characteristics of Demand for Pharmaceutical Products: An Examination of Four Cephalosporins. **AU** Ellison, Sara Fisher; Cockburn, Iain; Griliches, Zvi; Hausman, Jerry.

Coles, Melvyn G.

PD December 1996. **TI** Designing a Cheaper and More Effective Unemployment Benefit System. **AA** University of Essex. **SR** Centre for Economic Policy Research Discussion Paper: 1532; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 25. **PR** 4 pounds or $8.00. **JE** J63, J64, J65, J68. **KW** Unemployment. Insurance. Unemployment Benefits.

AB This paper describes an equilibrium labor market in which an unemployment benefit system cannot raise the average value of being unemployed in the long run. It proposes an alternative benefit system which pays generous benefit rates when unemployment is high, but pays much lower rates in booms. By targeting unemployment compensation to recessions, when being unemployed is particularly costly, this policy provides insurance equivalent to that provided by the current system. By reducing the value of remaining unemployed in booms, the benefit reduction increases wage flexibility over the cycle, which substantially reduces average unemployment.

Corbett, Jenny

PD January 1997. **TI** Inventory Behaviour: A Comparative Study of UK and Japanese Firms. **AU** Corbett, Jenny; Hay, Donald; Louri, Helen. **AA** Corbett and Hay: University of Oxford. Louri: Athens University of Economics and Business. **SR** Centre for Economic Policy Research Discussion Paper: 1545; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 23. **PR** 4 pounds or $8.00. **JE** D21, E22. **KW** Inventories. Japanese Firms. UK Firms. Panel Data.

AB This paper analyses the determinants of the inventory to assets ratio in panel data sets of Japanese and UK firms in the period 1960-85. The analytical framework sets inventory decisions in the context of decisions by the firm about other assets and liabilities, in contrast to traditional models of inventories. Investment in inventories in Japan is found to be particularly related to sector-specific inflation rates and expected sales, negatively related to expected profits, and not much affected by interest rates. By contrast, UK inventories are generally positively related to profit rates, and respond to short-term interest rates. Once other variables are taken into account, the coefficient on a time trend is positive for Japan (negative for the United Kingdom), which casts some doubt on the widely held view of Japanese innovation in inventory holding.

Corman, Hope

PD February 1996. **TI** A Time-Series Analysis of Crime and Drug Use in New York City. **AU** Corman, Hope; Mocan, H. Naci. **AA** Corman: Rider University and National Bureau of Economic Research. Mocan: University of Colorado and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5463; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 19. **PR** $5.00. **JE** K42, C32, D12. **KW** Crime. Illegal Drugs. Police. Deterrence. New York.

AB This report summarizes the results of a project which investigated the time series interrelationships between crime, drug use, police, and arrests in New York City. The authors use monthly data from 1970 through 1990. The authors find that drug usage, as proxied by drug deaths, increased from the mid-1980's to about 1988-1989. At the same time, felony drug arrests increased substantially. In a multivariate analysis, the authors found that the three property crimes investigated -- robberies, burglaries and motor vehicles thefts -- increased when there were unexpected increases in drug usage. The authors did not find such a relationship between drug use and murders or assaults, holding constant arrest rates and police. In addition, the authors found evidence of police deterrence, either directly, or through arrests, of property- related and assault offenses, but not for murders. Thus, the authors are able to find a causal relationship between drug usage and property-related felonies.

Corsetti, Giancarlo

TI Interpreting the ERM Crisis: Country-Specific and Systemic Issues. **AU** Buiter, Willem H.; Corsetti, Giancarlo; Pesenti, Paolo.

Cosh, Andy

PD June 1996. **TI** Takeovers, Institutional Investment and the Persistence of Profits. **AU** Cosh, Andy; Hughes, Alan; Singh, Ajit; Lee, Kevin. **AA** Cosh, Hughes and Singh: University of Cambridge. Lee: University of Leicaster. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP30; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 31. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** D21, G34. **KW** Takeovers. Institutional Investment. Profit Persistence.

AB This paper studies the impact of takeovers on the profitability of the participating companies and the influence of institutional investors on this process. It involves an original approach to assessing the profitability impact by modeling the dynamics of corporate profitability. It is shown that the standard counterfactual assumptions made in most merger effect studies are biased against finding profit -- enhancing merger effects where acquiring firms display above average profitability prior to the merger. On the other hand, acquisition is shown to reinforce the tendency amongst companies for their profitability to move towards industry norms over time.

PD June 1996. **TI** Semi-Parametric Estimation of the Company Growth-Size Relation. **AU** Cosh, Andy; Hughes, Alan; Lee, Hyehoon; Pudney, Stephen. **AA** Cosh and Hughes: University of Cambridge. Lee and Pudney: University of Leicaster. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP32; Department of

Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 38. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** C14, D21. **KW** Semi-Parametric Estimation. Kernel Estimation. Company Growth.

AB We illustrate the potential of a number of recently-developed semi- parametric estimators, in the context of an analysis of the relationship between firm growth and mortality on the one hand and size on the other, conditioning the analysis also on age and industry dummies. These estimators produce results that suggest quite serious misspecification of the conventional firm mortality probit models, and slight but significant functional misspecification of the usual linear growth-size regression. The semi parametric methods lead to a significantly different estimate of the joint mortality/growth distribution conditional on initial size, age, and industry.

PD December 1996. **TI** Innovation in UK SMEs: Causes and the Consequences for Firm Failure and Acquisition. **AU** Cosh, Andy; Hughes, Alan; Wood, Eric. **AA** University of Cambridge. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP48; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 20. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** L10, L86, O31, O32. **KW** Innovation. Manufacturing Firms. Service Firms. Firm Deaths. Acquisitions.

AB Using a specially constructed panel database, the authors analyze the links between innovation, survival and various aspects of business performance. The role of innovation is examined in the light of the model originally proposed by Downie (1958), and developed by Metcalfe and Gibbons (1986) and Metcalfe (1994). The model postulates a two-way relationship between innovation, growth and performance at the firm level. On the one hand, a firm's technological innovativeness in one period is a primary determinant of its performance in the next. On the other, a firm's performance is an important determinant of its future innovative effort. Poor performance is a spur to taking on the risk and uncertainty of innovation whilst past success may lead to the pursuit of more conservative policies. The results do not provide clear support for the latter hypotheses, but innovation significantly reduces the probability of firm failure and increases the probability of acquisition.

PD December 1996. **TI** The Changing Anatomy of Corporate Control and the Market for Executives in the UK. **AU** Cosh, Andy; Hughes, Alan. **AA** University of Cambridge. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP49; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 18. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** G30, J31. **KW** Corporate Governance. CEO Pay. Non-Executive Directors. Financial Institutions.

AB This paper examines changes in the pattern of CEO and Executive Directors' pay and the extend to non-executives' and financial institutions' involvement in the governance structure of giant UK companies over the period 1980-1996. It reveals that corporate boards remain dominated by "insider" directors who have spent most of their careers with the same firm. This is especially true at CEO level. There are signs of a more active inter-company market in junior executives but the most striking change in the sample is the widening of the pay gap between CEO's and other directors. The current agenda for reform of the board structure of UK quoted companies has done little to address the wider issues of community responsibility raised by Berle and Means over half a century ago.

Costa, Dora L.

PD January 1996. **TI** Displaying the Family: Union Army Pensions and Elderly Living Arrangements. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5429; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** $5.00. **JE** J12, I38, J14. **KW** Pensions. Divorce. Civil War.

AB I argue that the trend toward single households among retired men 65 years of age or older has been ongoing since 1880. When coresidence is measured by the percentage of elderly men living in the households of their children or other relatives, fully 57 percent of the decline in coresidence among elderly retired men from 1880 to 1990 occurred between 1880 and 1940. This trend has been disguised in more aggregated statistics by the relatively low retirement rates that prevailed in the past and by the unchanging coresidence levels of labor force participants. I investigate the factors that fostered this rise in separate living quarters for the aged by examining the determinants of living arrangements in 1910 among retired veterans receiving Union Army pensions. I find that Union Army pensions exerted a sizable, negative impact on the coresidence rates of the retired, implying that increases in income have always been associated with an increased demand for the privacy and autonomy provided by separated living arrangements. My findings imply that prior to 1940 rising incomes were the most important factor enabling the elderly to live alone. After 1940, increases in the attractiveness of independent living may have played a role.

Cowan, Robin

PD June 1996. **TI** A Model of Demand with Interactions Among Consumers. **AU** Cowan, Robin; Cowan, William; Swann, Peter. **AA** Cowan, Robin: University of Western Ontario and Ecole Nationale Superieure de Telecommunications. Cowan, William: University of Waterloo. Swann: University of Manchester. **SR** University of Western Ontario Department of Economics Research Report: RR/9609; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. **PG** 27. **PR** $10.00. **JE** D11, D62. **KW** Consumption. Evolutionary Theory. Interdependence. Externalities.

AB The aim of this paper is to study emergent patterns of demand when there are social interactions between different consumers. Specifically, our concern is with the case in which consumers' preferences are influenced by the consumption behavior of others. The analysis recognizes three reference groups. The first is a peer group with whom the individual interacts on a regular basis, and with whom the individual desires to share some consumption activities. The second is one or several contrast group(s), with which the individual seeks actively not to interact, and from whom the individual wishes to distinguish himself/herself. The third is an aspirational group, with whom the individual does not interact on a regular basis, but wishes that he/she did, and with whom the individual would like to share consumption activities, but cannot. In this relatively simple model, these groups influence the individual's behavior. The paper derives steady state and dynamic properties of the distribution of consumption over users. The degree to which consumption is restricted to a small group of similar agents is determined by the strength of the contrast and aspiration effects. The paper discusses the potential application of this modeling framework in a large number of consumption settings.

Cowan, William

TI A Model of Demand with Interactions Among Consumers. **AU** Cowan, Robin; Cowan, William; Swann, Peter.

Crafts, Nicholas

PD March 1997. **TI** Some Dimensions of the 'Quality of Life' During the British Industrial Revolution. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 339; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 19. **PR** no charge. **JE** I31, N33. **KW** British Industrialization. Well-Being. Mortality.

AB The paper sets out estimates for various aspects of well-being during British industrialization. Judgements about changes in living standards are shown to be sensitive to weighting procedures. It is argued that recent participants in the famous standards of living controversy have assigned undue importance to trends in heights and that concern for quality of life rather than real wages need not imply a pessimistic view of changes in aggregate well-being during the industrial revolution. Urban mortality experience is shown to be the least satisfactory aspect of well-being and it is suggested that this reflects difficulties of financing local public goods.

Crepon, Bruno

TI A La Recherche Des Moments Perdus: Covariance Models for Unbalanced Panels with Endogenous Death. **AU** Abowd, John M.; Crepon, Bruno; Kramarz, Francis; Trognon, Alain.

Currie, Janet

PD December 1995. **TI** Do Children of Immigrants Make Differential Use of Public Health Insurance? **AA** University of California, Los Angeles and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5388; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** $5.00. **JE** I38, I12. **KW** Medicaid. Immigration. Health Insurance.

AB Medicaid is one of the most costly welfare programs available to immigrants. This paper uses data from the 1989 to 1992 National Health Interview Survey to compare the effects of Medicaid eligibility on public and private health insurance coverage and on the utilization of medical services among children of natives and children of immigrants. Children of immigrants are more likely to be covered by Medicaid, but less likely to use health care. However, this study finds that recent expansions of eligibility had negligible effects on Medicaid coverage among children of immigrants. Although recent Medicaid expansions shifted as much as one-quarter of the cost of providing infra-marginal services to children of immigrants from private to public insurers in border states, they drew many previously unserved children of immigrants into care.

Da Silva, Sergio

PD April 1997. **TI** Chaos and Foreign Exchange Intervention in the Dornbusch Model. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 97/05; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 32. **PR** 2 pounds; no charge to students. **JE** E52, F31, F41, F47. **KW** Chaos. Dornbusch Model. Exchange Rate. Non-Linear Dynamics. Non- Sterilized Intervention.

AB The paper extend the De Grauwe & Dewachter (1992) and De Grause, Dewachter & Embrechts (1993, chapter 5) models in which chaos is generated in versions of the Dornbusch (1976a, 1976b) model of the exchange rate. The extension made here refers to the introduction of a policy rule linking the nominal exchange rate and the money supply. Taking into account that the Dornbusch model implicitly presupposes free float, I argue that the main result obtained by De Grauwe & Dewachter (1992) and De Grauwe, Dewachter & Embrechts (1993) -- that for particular parameter values the Dornbusch model produces time series of the exchange rate which are chaotic -- is valid only if there is not official non-sterilized intervention in the foreign exchange market. Simulation results of the non-linear model presented here suggest that monetary policies clearly signaling the intentions of the authorities in stabilizing the nominal exchange rate are able to collapse the chaotic series obtained for free float to predictable cycles or else to stable time series of the exchange rate.

Dacco, Roberto

PD August 1995. **TI** Why Do Regime Switching Models Forecast so Badly? **AU** Dacco, Roberto; Satchell, Stephen E. **AA** Birkbeck College. **SR** Birkbeck Discussion Paper in Financial Economics: FE/07/95; Birkbeck College, Department of Economics, 7/15 Gresse Street, London W1P 2LL, England. **PG** 18. **PR** no charge. **JE** C53. **KW** Regime Switching. Switching Model. Forecasting.

AB Most nonlinear techniques give good in sample fit to exchange rate data but they are usually outperformed by random walks or random walks with drift when used for out of sample forecasting. In the case of regime switching models it is possible to understand why forecasts based on the true model can be higher in mean squared error terms then those of a random walk or random walk with drift. In this paper we provide some analytical results for the case of a simple switching model, the segmented trend model. It requires only a small misclassification, when forecasting which regime the world will be in, to lose any advantage from knowing the correct model specification. Finally we discuss some results for the DM/Dollar exchange rate. We conjecture that the forecasting result is more general and describes limitations to the use of switching models for forecasting.

Danthine, Jean-Pierre

PD December 1996. **TI** Front-Running by Mutual Fund Managers: It Ain't That Bad. **AU** Danthine, Jean-Pierre; Moresi, Serge. **AA** Danthine: Universite de Lausanne. Moresi: Georgetown University. **SR** Centre for Economic Policy Research, Discussion Paper: 1528; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 21. **PR** 4 pounds or $8.00. **JE** G14, G23. **KW** Front-Running. Insider Trading. Noise

Trading.
AB This paper evaluates the welfare implications of front-running by mutual fund managers. It extends the model of Kyle (1985) to a situation in which the insider with fundamentals-information competes against an insider with trade-information and in which noise trading is endogenized. Noise traders are small investors trading through mutual funds to hedge non-tradable or illiquid assets. The insider with trade- information is one of the fund managers. We find that front-running activity reduces their customers' liquidity costs, but it also reduces their hedging benefits. As a result, the customers of the front-running manager may be worse off and place smaller orders. The opposite is true, for those investors who are not subject to front-running, however. In aggregate, front-running will either have no effect, or have a positive effect on welfare.

Daveri, Francesco

TI Where do Migrants Go? Risk-Aversion, Mobility Costs and the Locational Choice of Migrants. **AU** Faini, Riccardo; Daveri, Francesco.

Davies, James B.

PD March 1996. **TI** The Effects of Gender Control on Fertility and Children's Consumption. **AU** Davies, James B.; Zhang, Junsen. **AA** Davies: University of Western Ontario. Zhang: Chinese University of Hong Kong. **SR** University of Western Ontario Department of Economics Research Reports: RR/9604; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. **PG** 30. **PR** $10.00. **JE** I31, J13, J16. **KW** Children. Fertility. Gender. Human Capital Altruism.
AB The purpose of this paper is to analyze the effects of preference for children of a particular gender on fertility and children's welfare, with and without sex selection or "gender control." Impacts on investments in children's human capital, bequests and fertility are studied in a model based on parental altruism. Both pure sex preference, a feature of the parental utility function, and indirect preference, which arises as a result of price effects -- the two forms of sex preference originally distinguished by Ben-Porath and Welch (1976, 1980) -- are modeled. We find that the impact of sex preference on the treatment of sons vs. daughters may be very different when parents practice sex selection than when gender is exogenous, and that the effect of gender control on fertility may well be positive.

PD July 1996. **TI** Wealth Inequality and Age. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Report: RR/9613; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. **PG** 26. **PR** $10.00. **JE** D91, E32, J14. **KW** Income Inequality. Consumption Behavior.
AB Deaton and Paxon (1994) have recently drawn attention to the age profiles of income and consumption inequality. They showed that these profiles are both upward sloping over the lifetime in Taiwan, the U.K., and the U.S. Arguing that only models of consumption behavior which can reproduce such positive slopes are admissible, they examined the predictions for consumption and income inequality coming from the life-cycle and other models of consumption. Interestingly, while age profiles of inequality for consumption, total household income, and labor earnings do all generally slope up, the opposite is true for non-human wealth up until retirement. A wide variety of studies have found negatively sloped age profiles of inequality for household net worth over the working lifetime, with a rise in inequality in the retirement period. It is interesting to ask what models of consumption behavior are capable of generating this negatively sloped profile, in addition to the positive sloped profiles of consumption and income inequality. This paper asks whether applying this additional requirement puts restrictions on the set of admissible models of consumption behavior which go beyond those found by Deaton and Paxon.

Davis, Donald

TI Tariff Phase-Outs: Theory and Evidence from GATT and NAFTA. **AU** Kowalczyk, Carsten; Davis, Donald.

Davis, Steven J.

PD December 1995. **TI** Employer Size and the Wage Structure in U.S. Manufacturing. **AU** Davis, Steven J.; Haltiwanger, John. **AA** Davis: University of Chicago and National Bureau of Economic Research. Haltiwanger: University of Maryland and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5393; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 35. **PR** $5.00. **JE** D31, J31, L60. **KW** Wages. Inequality. Manufacturing. Industry.
AB The authors study how the hourly wage structure varies with establishment size and how wage dispersion breaks down into between- plant and within-plant components. The study combines household and establishment data for the U.S. manufacturing sector in 1982. 1) Wage dispersion falls sharply with establishment size for nonproduction workers and mildly for production workers. 2) Size-class differences in wage dispersion often mask even sharper differences in the dispersion of wages generated by observable worker characteristics and in the "skill prices" on those characteristics. 3) In terms of dispersion in predicted log wages, worker heterogeneity tends to rise with establishment size; production workers are much more homogenous in the union sector, but only at plants with 1,000 or more workers. 4) Unobserved factors generate sharply greater wage dispersion at smaller establishments.

de Brouwer, Gordon

PD December 1996. **TI** External Influences on Output: An Industry Analysis. **AU** de Brouwer, Gordon; Romalis, John. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia, Research Discussion Paper: 9612; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. **PG** 25. **PR** no charge. **JE** C22, E32, F41, L60, O56. **KW** Internationalization. International Linkages. Output. Sectoral Analysis.
AB The paper explores international linkages by looking at the production side of the national accounts for Australia and the United States. Industrial structures in the two countries are similar, and about two-thirds of Australian output is linked to that of the United States. The U.S. links in the agricultural and mining sectors are related to aggregate demand in the United States, both in the short and long run. But in manufacturing -- and notably in goods for which production is technology intensive and changing over time -- there are persistent, long-run links with the corresponding sector in the United States. These links seem to be driven by the supply-side: technological

change, innovation and new products are transmitted from the United States and elsewhere to Australia, mostly within two to three years. Domestic demand dominates service sectors. Domestic policies, however, are still important overall, particularly in the short to medium run.

De Fraja, Gianni

PD November 1996. **TI** Minimum Wage Legislation, Work Conditions and Employment. **AA** University of York. **SR** Centre for Economic Policy Research, Discussion Paper: 1524; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 21. **PR** 4 pounds or $8.00. **JE** J23, J31. **KW** Minimum Wage. Training. Capital Investment.

AB The effects of minimum wage legislation are analyzed under the assumption that firms are able to alter the working conditions of their employees, and that workers have different preferences about the characteristics of their job. The main findings tally with Card and Krueger's (1995) puzzling empirical evidence about the effects of changes in the minimum wage: the effects on employment are limited; there is a positive spillover on high wage workers; and there is bunching of workers at the minimum wage. The paper concludes by showing that if employers can change investment in fixed capital and in training, then an increase in the minimum wage will induce them to increase both, and this in turn may increase aggregate employment.

De Grauwe, Paul

PD November 1996. **TI** How to Fix Conversion Rates at the Start of EMU. **AA** Katholieke Universiteit Leuven. **SR** Centre for Economic Policy Research, Discussion Paper: 1530; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 25. **PR** 4 pounds or $8.00. **JE** F33, F36, F42. **KW** Monetary Integration. Maastricht Treaty. Exchange Rate.

AB This paper analyses several procedures for fixing conversion rates at the start of EMU. One consists of announcing a fixed conversion rate; a second (proposed by Lalmfalussy) would announce that the conversion rate will be an average of past market exchange rates; and a third involves announcing that the market exchange rate observed just prior to entry will be the conversion rate. The paper evaluates these different procedures and concludes that the Lamfalussy rule is unattractive compared to the two other alternatives.

de Janvry, Alain

PD January 1997. **TI** NAFTA and Agriculture: An Early Assessment. **AU** de Janvry, Alain; Sadoulet, Elisabeth. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 807; 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** 25 cents per page domestic; 50 cents per page foreign. **JE** F13, Q13. **KW** NAFTA. Agriculture. Free Trade. Trade Agreements.

AB While the effects of NAFTA will not be known for quite sometime, an early appraisal can be made (1) using an econometric decomposition of trade patterns with and without the agreement and (2) assessing NAFTA as a learning process. Results show that the Agreement helped increase Mexican imports from the U.S. when Mexican incomes were rising and helped prevent a further fall in imports when incomes were falling. As a learning process, the most promising aspect of the Agreement is reliance on tri-national civil society as the warrant of implementation of the clauses of the agreement and of each country's labor and environmental laws. This is inducing the active participation of a thickening web of corporatist and non-governmental organizations that cut across national boundaries. Political sustainability of the Agreement requires to deal not only with he transitory poverty created by economic adjustments, but also with the deeper problem of social exclusion from the benefits of globalization.

PD March 1997. **TI** Agricultural and Rural Development Policy in Latin America: New Directions and New Challenges. **AU** de Janvry, Alain; Key, Nigel; Sadoulet, Elisabeth. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 815; 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** 25 cents per page domestic; 50 cents per page foreign. **JE** O18, O54, Q18. **KW** Agricultural Development. Urban Development. Latin America.

AB The purpose of this paper is to analyze and assess trends in agricultural development policy in Latin America, to identify and synthesize new policy directions, and to highlight emerging challenges and avenues for policy innovation. The paper begins with an overview of how the general evolution of the Latin American countries toward the adoption of neoliberal economic policies and the retrenchment of the state in the wake of economic reform are impacting the design of policies and the structure of policy making institutions. Part II examines economic and agricultural performance in Latin America during the last 25 years. Part III analyzes the evolution of agricultural policy in the specific areas of trade, product and factor markets, land reform and land markets, research and extension, and irrigation. Part IV explores emerging trends, issues, and challenges that define current policy debates and impact the structure of policy making institutions, including local responses to globalization, policy differentiation, new approaches to poverty reduction, institutional reform and reconstruction, and the sequencing of reforms. The final section summarizes the main themes of the paper and presents a normative perspective on the future direction of agricultural policy in the region.

TI The Role of Agriculture in Economic Development: Visible and Invisible Surplus Transfers. **AU** Winters, Paul; de Janvry, Alain; Sadoulet, Elisabeth; Stamoulis, Kostas.

de la Fuente, Angel

PD December 1996. **TI** On the Sources of Convergence: A Close Look at the Spanish Regions. **AA** Universidad de Barcelona. **SR** Centre for Economic Policy Research Discussion Paper: 1543; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 42. **PR** 4 pounds or $8.00. **JE** O18, O30, O40, O52, R11. **KW** Growth. Regional Convergence. Catch-Up. Spain.

AB We investigate the sources of productivity convergence using panel data for the Spanish regions. As a framework, we develop a simple descriptive growth model which allows for factor accumulation, technological diffusion and rate effects from human capital and which includes fixed regional effects to allow for unobserved factors. Our results indicate that technological catch-up, the equalization of education levels and the redistribution of employment across regions, accounts for most of the observed reduction in regional disparities. We also find that, even after controlling for factor stocks and flows and technological diffusion, there remains very significant cross-regional differences in estimated total factor productivity levels, which point to the omission of important variables and to the need for a more disaggregated analysis. Lastly, we provide some preliminary evidence on the importance of sectoral factors in explaining the evolution of the regional income distribution.

de Roos, Nicolas

PD November 1996. **TI** Towards an Understanding of Australia's Co-Movement With Foreign Business Cycles. **AU** de Roos, Nicolas; Russell, Bill. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia, Research Discussion Paper: 9607; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. **PG** 32. **PR** no charge. **JE** E32, F14, F41, G15, 056. **KW** International Linkages. Business Cycles. Exports. Imports. Stock Markets.

AB This paper identifies two transmission mechanisms which might contribute to explaining the well-documented correlation between Australian and foreign business cycles. The first is through exports. We find that the U.S. and Japan have a high output elasticity of demand for Australia's exports. Consequently, their business cycles have a larger impact on Australia's exports than that suggested by their market shares. The second mechanism is through the share market. Both the U.S. and Australian share markets appear to have a significant impact on Australian activity. Evidence is also found that the responses of investment to the share market in the two countries are remarkably similar. Given that the share markets are highly correlated, the similarity in response lags may help to explain the correlation in business cycles.

De Waegenaere, A.

PD December 1996. **TI** Asset Markets and Investment Decisions. **AU** De Waegenaere, A.; Polemarchakis, H. M.; Ventura, L. **AA** De Waegenaere: CentRE and Tilburg University. Polemarchakis: Universite Catholique de Louvain. Ventura: Universita G. D'Annunzio and Universite Catholique de Louvain. **SR** Yale Cowles Foundation Discussion Paper: 1147; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 23. **PR** no charge. **JE** D46, D52. **KW** Assets. Profit. Investment.

AB In an incomplete asset market, firms assign values to investment plans by projecting their payoffs on the span of the payoffs of marketed assets; equivalently, firms employ the Capital Asset Pricing Model. This is a criterion that does not require firms to possess information, such as the marginal valuation of revenue across date -- events by shareholders, which is not observable; rather, it is based on information revealed by the prices and payoffs of marketed assets. Under standard assumptions, competitive equilibria exist. But, competitive equilibrium allocations need not satisfy a condition of constrained pareto optimality that recognizes the incompleteness of the asset market; and, even in the absence of nominal assets, competitive equilibrium allocations are generically indeterminate -- they are determinate if firms consider the commodity payoffs of shares.

Deakin, Simon

TI Contracts Laws, Social Norms and Inter-Firm Cooperation. **AU** Arrighetti, Alessandro; Bachmann, Reinhard; Deakin, Simon.

PD December 1996. **TI** Inflation, Economic Performance and Employment Rights. **AU** Deakin, Simon; Ewing, Keith. **AA** Deakin: University of Cambridge. Ewing: King's College London. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP45; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 22. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** J30, J50, K31. **KW** Labor Law. Collective Bargaining. European Community. Social Policy.

AB After nearly two decades of "deregulation" in the labor market, collective bargaining in Britain appears to be in rapid decline. Multi- employer bargaining has been particularly hard hit. However, most other member states of the European Union retain an important role for collective bargaining at sector or industry level. The goal of transnational collective bargaining is also nearer to fulfillment, as a result of the process of EU-level social dialogue. In general, multi- employer bargaining plays an important part in reducing inflationary pressures, encouraging cooperation between labour and management, and promoting social cohesion. In Britain, the restoration of dialogue and negotiation at sector level would be an essential step in the reconstruction of the collective bargaining system.

Degeorge, Francois

PD December 1996. **TI** Hedging and Gambling: Corporate Risk Choice When Informing the Market. **AU** Degeorge, Francois; Moselle, Boaz; Zeckhauser, Richard. **AA** Degeorge: HEC School of Management. Moselle: Northwestern University. Zeckhauser: Harvard University. **SR** Centre for Economic Policy Research, Discussion Paper: 1520; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 27. **PR** 4 pounds or $8.00. **JE** D82, G03. **KW** Private Information. Risk Choice. Agency Costs. Hedging.

AB This paper analyses corporate risk choice when firms and their managers have private information regarding firm quality. Our model employs the following sequence: (1) a manager learns the firm's type (good or bad), which determines its opportunity locus relating to risk and expected return; (2) the manager selects a level of risk; (3) a period payoff is reaped; (4) potential purchasers of the firm draw inferences from the period payoff; and (5) the firm is sold in a competitive auction. If firms' choices of risk are observed by the market, pooling behavior results. Among the pooling equilibria, we show that good firms prefer those with lower variance, which reveal more information, whereas bad firms prefer higher variance equilibria. If risk level choices can only be partially observed, as we expect, and if the market has no strong prior belief about whether firms are good or bad, then good firms will hedge and bad firms will gamble. If the market's prior beliefs are highly unfavorable (favorable), both types gamble (hedge) hoping to alter (avoid refuting) these beliefs. Our empirical evidence confirms our theoretical results when risk choices are not fully observed.

Dehejia, Vivek H.

PD February 1997. **TI** Will Gradualism Work When Shock Therapy Doesn't? **AA** Carleton University. **SR** Centre for Economic Policy Research Discussion Paper: 1552; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 25. **PR** 4 pounds or $8.00. **JE** F11, F13. **KW** Gradualism. Policy Reform. Shock Therapy. Structural Adjustment.

AB When shock therapy is politically infeasible, will gradualism work? Mussa (1986) conjectured, in the context of a neoclassical model of adjustment, that the answer was "yes". This paper takes up the Mussa conjecture by: (i) building a political-economy model in which it makes sense; (ii) stating the relevant political-economy constraint rigorously; and (iii) analyzing the question in the context of Mussa's model. It turns out that, in general, there is no a priori presumption that gradualism will work when shock therapy does not, because it has conflicting effects in a dynamic general equilibrium. The paper goes on to add further structure to the problem in the form of: (i) a simple parameterization of the policy choice; and (ii) a linearization of the model around a steady state. It is then possible to confirm the Mussa conjecture in a "local" sense. Extensive numerical simulations of the non-linear model under a wide variety of parameter configurations confirm that the results are robust even for large reforms and even when the economy begins far away from its eventual steady state.

Dei Ottati, Gabi

PD March 1996. **TI** The Remarkable Resistance of the Industrial Districts of Tuscany. **AA** University of Florence. **SR** University of Cambridge, ESRC Centre for Business Research Working Papers: WP28; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 20. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** D31, L11, L22, L60. **KW** Industrial Districts. Tuscany. Small Firms. Innovation.

AB This paper analyzes the different ways -- product diversification and innovation, quality upgrading, commercial specialization -- in which small firms in the industrial districts of Tuscany, Italy, have been successfully restructuring their activities in the face of intensified competition, with consequent changes in internal and external divisions of labor. The growth of "enterprise groups" and collective action have been essential to this successful adaptation.

den Haan, Wouter J.

TI Small Sample Properties of GMM for Business Cycle Analysis. **AU** Christiano, Lawrence J.; den Haan, Wouter J.

PD May 1996. **TI** Inferences from Parametric and Non-Parametric Covariance Matrix Estimation Procedures. **AU** den Haan, Wouter J.; Levin, Andrew T. **AA** den Haan: University of California, San Diego and National Bureau of Economic Research. Levin: Federal Reserve Board of Governors. **SR** National Bureau of Economic Research Technical Paper: 195; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C12, C13, C14, C51, C52. **KW** Covariance Matrix. Consistency. HAC Estimation.

AB In this paper, we propose a parametric spectral estimation procedure for constructing heteroskedasticity and autocorrelation consistent (HAC) covariance matrices. We establish the consistency of this procedure under very general conditions similar to those considered in previous research, and we demonstrate that the parametric estimator converges at faster rate than the kernel-based estimators proposed by Andrews and Monahan (1992 and Newey and West (1994). In finite samples, our Monte Carlo experiments indicate that the parametric estimator matches, and in some cases greatly exceeds, the performance of the prewhitened kernel estimator proposed by Andrews and Monahan (1992). These simulation experiments illustrate several important limitations of non-parametric HAC estimation procedures, and highlight the advantages of explicitly modeling the temporal properties of the error terms.

PD June 1996. **TI** A Practitioner's Guide to Robust Covariance Matrix Estimation. **AU** den Haan, Wouter J.; Levin, Andrew T. **AA** den Haan: University of California, San Diego and National Bureau of Economic Research. Levin: Federal Reserve Board of Governors. **SR** National Bureau of Economic Research Technical Paper: 197; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C12, C14, C15, C51. **KW** Covariance Matrix. HAC Estimation.

AB This chapter analyzes kernel-based and parametric spectral estimation procedures for constructing heteroskedasticity and autocorrelation consistent (HAC) covariances matrices, and provides guidelines for effective implementation of these procedures. To implement a kernel-based procedure, the practitioner must choose a particular kernel, a bandwidth selection method, and a prewhitening filter. To implement a parametric procedure, the practitioner must choose a class of admissible models and a criterion to select a particular model within this class. Simulation experiments indicate that these choices can have important implications for the accuracy of inferences based on the estimated HAC covariance matrix. Thus, rather than viewing any of these procedures as fully "automatic," a combination of diagnostic statistics and common sense should be regarded as essential in practical applications.

Diamond, Peter

PD July 1997. **TI** Rationing Medical Care: An Economist's Perspective. **AA** Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 97/10; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 26. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** I10. **KW** Rationing. Medical Care. Health Insurance.

AB In this essay, prepared for a symposium in Economics and Philosophy, I identify some issues that arise in trying to bring the kind of economics I normally practice to this subject. I proceed by examining the parallels and differences between allocating medical care and several other allocation problems, starting with the distribution of income generally and then in the more specific context of retirement income. I distinguish two types of questions. The evaluation question is the examination of a given allocation in order to access its "quality" in either absolute terms or relative to some other allocation. The decision question is the use of an evaluation system and a description of a mechanism allocating medical care (and other resources) in order to decide whether changing the allocation mechanism in some way is an improvement. Discussion of the allocation mechanism leads to a focus on equilibrium, that is, a focus on the outcomes that happen given the design of the mechanism. Consideration of equilibrium leads to the argument that one needs to consider who pays for medical services along with who gets them, since an equilibrium is inadequately specified without identifying the sources of resources as well as their uses.

Diao, Xinshen

TI The Strategic Interdependence of a Shared Water Aquifer: A General Equilibrium Analysis. **AU** Roe, Terry L.; Diao, Xinshen.

PD May 1995. **TI** Environment, Welfare and Gains from Trade: A North-South Model in General Equilibrium. **AU** Diao, Xinshen; Roe, Terry L. **AA** University of Minnesota. **SR** University of Minnesota Economic Development Center Bulletin: 95/04; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 46. **PR** no charge. **JE** D58, F11, Q28. **KW** Environment. Trade. General Equilibrium.

AB The effects of environment on trade and welfare are analyzed in a modified Heckscher-Ohlin framework using quasi-homothetic preferences to account for differences in countries' expenditure shares on health. Three types of pollution, local-disembodied, global-disembodied and embodied, results as by-product of inputs used in production. For each case, the Walrasian, Pareto optimal and the Regulators' problem are analyzed. The optimal tax is shown to improve each country's welfare if the country is small in the world market. Otherwise, changes in the terms of trade may cause one country to be made better off at the expense of the other. Interdependence for the global-disembodied case is explored using a one-shot Nash game. For the embodied pollution, taxing the polluting input only can cause a decline in welfare when the polluting input is intensively used. Instead, a tax on polluting input in combination with a subsidy to the non-polluting input is optimal. In general, the results suggest compensatory payments may be required to encourage abatement policies. Contrary to other approaches, an abatement policy does not necessarily decrease a country's comparative advantage, i.e., reduce exports of the polluting sector.

PD May 1996. **TI** A Dynamic CGE Model: An Application of R&D-Based Endogenous Growth Model Theory. **AU** Diao, Xinshen; Elbasha, Elamin H.; Roe, Terry L.; Yeldan, Erinc. **AA** Diao: United States Department of Agriculture. Elbasha and Roe: University of Minnesota. Yeldan: Bilkent University. **SR** University of Minnesota Economic Development Center Bulletin: 96/01; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 44. **PR** no charge. **JE** F11, O31, O41. **KW** Applied General Equilibrium. Trade. Growth.

AB An R&D based endogenous growth -- applied general equilibrium model is developed from an underlying analytical model which combines Romer's capital variety with Grossman and Helpman's multi-sector open economy model. The transitional dynamics of the analytical model are derived. For numerical implementation, a time discrete empirical model, with an Armington structure, is fit to East Asian data of the social accounting matrix variety. Simulations of trade reform are performed and their static and dynamic effects compared. The transition paths of the state variables are found to have a half-life of five to six periods. A solution of the Social Planner's problem, and interventions which seek to obtain this outcome from the decentralized model are also obtained.

PD October 1996. **TI** Dynamic Gains and Losses from Trade Reform: An Intertemporal General Equilibrium Model of the United States and MERCOSUR. **AU** Diao, Xinshen; Somwaru, Agapi. **AA** United States Department of Agriculture. **SR** University of Minnesota Economic Development Center Bulletin: 96/03; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 48. **PR** no charge. **JE** F11, F13. **KW** Trade Reform. General Equilibrium. MERCOSUR.

AB An intertemporal general equilibrium model of the United States and MERCOSUR is created to analyze the dynamic adjustments in both regions' commodity and capital markets after trade liberalization. Simulation results show that tariff reductions initiated by MERCOSUR have small positive effects on the U.S. production, trade, consumption and investment, and stimulates MERCOSUR's growth, and improves its current account. If tariffs are eliminated by both regions, both regions are better off from points of intertemporal social welfare, international trade, domestic investment and growth. Agriculture benefits more from trade reform, which implies that rural-agricultural sector might have been a victim of trade protection policies.

Dickens, Richard

PD November 1996. **TI** The Evolution of Individual Male Earnings in Great Britain: 1975-94. **AA** London School of Economics and University College London. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 306; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 47. **PR** no charge. **JE** J31. **KW** Wage Level. Structure. Great Britain.

AB In this paper I study the changing dynamic structure of male wages in Great Britain using the new Earnings Survey Panel from 1975-94. Computing the covariance structure of individual wages by cohort I find evidence of a substantial permanent component of earnings that increases over the life cycle and a highly persistent, serially correlated transitory component. In addition, the estimated variances of both the permanent and transitory components have risen over this period, each explaining about half the rise in inequality. These results imply that the observed cross sectional rise in inequality is reflective of largely permanent differences between individuals that have grown over the last decade or so.

Diebold, Francis X.

PD February 1995. **TI** Modeling Volatility Dynamics. **AU** Diebold, Francis X.; Lopez, Jose A. **AA** Diebold: University of Pennsylvania and National Bureau of Economic Research. Lopez: University of Pennsylvania. **SR** National Bureau of Economic Research Technical Paper: 173; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C22, C32, C52. **KW** ARCH models. Volatility. Conditional Volatility.

AB Recently there has been a great deal of interest in modeling volatility fluctuations. ARCH models, for example, provide parsimonious approximations to volatility dynamics. Here we provide a selective amount of certain aspects of conditional volatility modeling that are of particular relevance in macroeconomics and finance. First, we sketch the rudiments of a rather general univariate time-series model, allowing for dynamics in both the conditional mean and variance. Second, we discuss both the economic and statistical motivation for the models, we characterize their properties, and we discuss issues related to estimation and testing. Finally, we discuss a variety of applications and extensions of the basic models.

PD February 1995. **TI** Dynamic Equilibrium Economies: A Framework for Comparing Models and Data. **AU** Diebold, Francis X.; Ohanian, Lee E.; Berkowitz, Jeremy. **AA** Diebold: National Bureau of Economic Research and University of Pennsylvania. Ohanian and Berkowitz: University of Pennsylvania. **SR** National Bureau of Economic Research Technical Paper: 174; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C52. **KW** Dynamic Equilibrium. Goodness-of-Fit. Cattle Cycle. Bootstrapping.
AB We propose a constructive, multivariate framework for assessing agreement between (generally misspecified) dynamic equilibrium models and data. The framework enables a complete second-order comparison of the dynamic properties of models and data in both graphical and numerical ("goodness-of-fit") form. We propose bootstrap algorithms to evaluate the significance of deviations between models and data. We use the goodness-of-fit criteria to produce estimators that optimize economically-relevant loss functions and whose finite-sample properties are again approximated using bootstrap procedures. We provide a detailed illustrative application to modeling the U.S. cattle cycle.

PD March 1996. **TI** Deterministic vs. Stochastic Trend in U.S. GNP, Yet Again. **AU** Diebold, Francis X.; Senhadji, Abdelhak S. **AA** Diebold: University of Pennsylvania and National Bureau of Economic Research. Senhadji: Washington University, St. Louis. **SR** National Bureau of Economic Research Working Paper: 5481; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 9. **PR** $5.00. **JE** E13, C22, E23, C53. **KW** Unit Roots. Output. Trend. Stationarity.
AB A sleepy consensus has emerged that U.S. GNP data are uninformative as to whether trend is better described as deterministic or stochastic. Although the distinction is not critical in some contexts, it is important for point forecasting, because the two models imply very different long-run dynamics and hence different long-run forecasts. The authors argue that, even for the famously recalcitrant GNP series, unit root tests over long spans can be informative. Our results make clear that uncritical repetition of the "the authors don't know, and the authors don't care" mantra is just as scientifically irresponsible as blind adoption of the view that "all macroeconomic series are difference-stationary," or the view that "all macroeconomic series are trend-stationary." There is simply no substitute for serious, case-by- case analysis.

PD March 1996. **TI** Forecast Evaluation and Combination. **AU** Diebold, Francis X.; Lopez, Jose A. **AA** Diebold: University of Pennsylvania and National Bureau of Economic Research. Lopez: University of Pennsylvania. **SR** National Bureau of Economic Research Technical Paper: 192; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C52, C53. **KW** Forecasting. Composite Forecasts. Combining Forecasts. Forecast Evaluation.
AB It is obvious that forecasts are of great importance and widely used in economics and finance. Quite simply, good forecasts lead to good decisions. The importance of forecast evaluation and combination techniques follows immediately -- forecast users naturally have a keen interest in monitoring and improving forecast performance. More generally, forecast evaluation figures prominently in many questions in empirical economics and finance. We provide selective account of forecast evaluation and combination methods. First we discuss evaluation of a single forecast, and in particular, evaluation of whether and how it may be improved. Second, we discuss the evaluation and comparison of the accuracy of competing forecasts. Third, we discuss whether and how a set of forecasts may be combined to produce a superior composite forecast. Fourth, we describe a number of forecast evaluation topics of particular relevance in economics and finance, including methods for evaluating direction-of-change forecasts, probability forecasts and volatility forecasts.

PD April 1996. **TI** Exact Maximum Likelihood Estimation of Observation-Driven Econometric Models. **AU** Diebold, Francis X.; Schuermann, Til. **AA** Diebold: University of Pennsylvania and National Bureau of Economic Research. Schuermann: AT&T Bell Labs. **SR** National Bureau of Economic Research Technical Paper: 194; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C13, C14, C15, C23. **KW** Exact Estimators. Maximum Likelihood. ARCH Models.
AB The possibility of exact maximum likelihood estimation of many observation-driven models remains an open question. Often only approximate maximum likelihood estimation is attempted, because the unconditional density needed for exact estimation is not known in closed form. Using simulation and nonparametric density estimation techniques that facilitate empirical likelihood evaluation, we develop an exact maximum likelihood procedure. We provide an illustrative application to the estimation of ARCH models, in which we compare the sampling properties of the exact estimator to those of several competitors. We find that, especially in situations of small samples and high persistence, efficiency gains are obtained. We conclude with a discussion of directions for future research, including application of our methods to panel data models.

DiPasquale, Denise

PD February 1996. **TI** The L.A. Riot and the Economics of Urban Unrest. **AU** DiPasquale, Denise; Glaeser, Edward L. **AA** DiPasquale: University of Chicago. Glaeser: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5456; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 22. **PR** $5.00. **JE** K42, J15, D31. **KW** Crime. Riots. Multiculturalism. Poverty. Race.
AB The Los Angeles riot of 1992 resulted in 52 deaths, 2,500 injuries and at least $446 million in property damage; this staggering toll rekindled interest in understanding the underlying causes of widespread social phenomenon of rioting. The authors examine the causes of rioting using international data, evidence from the race riots of the 1960's in the U.S., and Census data on Los Angeles, 1990. The authors find some support for the notions that the opportunity costs of time and

the potential costs of punishment influence the incidence and intensity of riots. Beyond these individual costs and benefits, community structure matters. In our results, ethnic diversity seems a significant determinant of rioting, while the authors find little evidence that poverty in the community matters.

Dixit, Avinash

PD April 1996. **TI** Common Agency and Coordination: General Theory and Application to Tax Policy. **AU** Dixit, Avinash; Grossman, Gene M.; Helpman, Elhanan. **AA** Dixit and Grossman: Princeton University. Helpman: Tel Aviv University and CIAR. **SR** Princeton Woodrow Wilson School Discussion Papers in Economics: 179; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. **PG** 33. **PR** no charge. **JE** D72, D78. **KW** Common Agency. Lobbying. Special Interests. Auctions.
AB not available.

Driffill, John

PD October 1996. **TI** Unions and Wages in 1984 and 1990: Evidence From Cross Sections of the Establishments in the UK. **AU** Driffill, John; Meschi, Meloria. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9643; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 13. **PR** no charge. **JE** F15, J30, J50. **KW** Wages. Unions. Labor Markets.
AB Despite much research into trade union wage differentials there remain several unresolved questions. These concern, inter alia, the role of (i) industrial sector, (ii) skill category, (iii) product market competition, (iv) closed shop, and (v) changes over time in differentials. In this paper, first, we investigate whether it is generally true for all manual workers that unions are able to extract a rent only when the establishment in which they operate has some product market power. Second, we investigate whether this is true independently of the sector of activity in which the establishment operates. Third, we analyse the changes in the wage differential between establishments with market power and competitive establishments, and changes in union/non- union mark-ups, between 1984 and 1990. The sources of data are the 1984 and 1990 waves of the Workplace Industrial Relations Survey. On the first question, no clear picture emerges. On the second, while there is no evidence of unions being able to extract rent in manufacturing in 1984, in 1990 there are positive and significant wage differentials in competitive establishments for some skill groups. On the third, we find no evidence that markups have fallen systematically over the period.

Dryden, Neil

TI What Makes Firms Perform Well? **AU** Nickell, Stephen; Nicolitsas, Daphne; Dryden, Neil.

Dueker, J.

PD April 1994. **TI** Asymmetry of the Prime Rate and Firms' Preference for Internal Finance. **AU** Dueker, J.; Thorton, Daniel L. **AA** Federal Reserve Bank of St. Louis. **SR** Federal Reserve Bank of St. Louis Working Paper: 94/017A; Research Division, Working Papers, Federal Reserve Bank of St. Louis, P.O. Box 442, St. Louis, MO 63166. Website: www.stls.frb.org. **PG** 25. **PR** no charge. **JE** C25, E22, G22. **KW** Internal Finance. Prime Rate. Information Asymmetry.
AB This article tests for asymmetry in the behavior of bank lending rates by testing the hypothesis that the prime rate responds more fully and quickly to increases than decreases in market interest rates. The econometric methodology used is better suited to the discreteness and rigidity of the prime rate than that of previous studies. Our results suggest that banks adjust the prime rate asymmetrically in response to changes in the discount rate, the commercial paper rate, and the spread between the prime and commercial paper rates. Asymmetry in bank lending rates is implied by several explanations for the preference among small firms for internal finance. Asymmetry in bank lending rates may result from the fact that individual banks have acquired costly information which prevents their customers from responding quickly to changes in loan terms, or it may stem from a cyclical "lemons" premium resulting from informational asymmetries [Oliner and Rudebusch (1992)]. Either way, asymmetric behavior of bank lending rates, such as the prime rate, may be part of a more complete explanation of small firms' preference for internal finance.

Dueker, Michael

TI Product Cycles, Innovation and Relative Wages in European Countries. **AU** Butler, Alison; Dueker, Michael.

Duncan, John

PD March 1996. **TI** Insurance Markets and Long-Run Equilibrium with Systemic Risks: The Case of the US Federal Crop Insurance Program. **AA** University of Cambridge. **SR** University of Cambridge, ESRC Centre for Business Research Working Papers: WP29; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 31. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** D61, G22, G38. **KW** Systemic Risks. Insurance. Reinsurance. Reservation Preferences.
AB This study considers the effects of systemic risks on the current U.S. federal program to deliver crop insurance through reinsurance, on the basis of a definition of competitive equilibrium as a function of reservation preference levels for firm entry and exit. High systemic risks may render reinsurance schemes unrealistic.

Duncan, Ron

TI Developing Country Export Growth Technology and Labour Markets in Developed Countries: General Equilibrium Perspectives. **AU** Tyers, Rod; Duncan, Ron.

Dungey, Mardi

PD February 1997. **TI** Towards a Structural VAR Model of the Australian Economy. **AU** Dungey, Mardi; Pagan, Adrian. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 319; Department of Economics, The Faculties, Australian National University, Canberra ACT 0200, Australia. **PG** 34. **PR** no charge. **JE** C51, F41. **KW** Structural VAR. Monetary Policy. GDP Decomposition. Australian Economy.
AB We develop a ten variable structural VAR model of the Australian economy for the period 1980 to 1995. The VAR methodology has not been widely applied in the Australian

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context, despite its popularity in quantitative macroeconomics internationally. To date, investigations using the VAR approach have produced the surprising results that the domestic economy is little influenced by overseas conditions, and has difficulty identifying any effect of monetary policy. Our model includes a more fully specified overseas sector and asset markets. The results highlight the importance of overseas demand shocks in determining changes to Australian activity, particularly in the long run. Supply side shocks have limited impact. We also analyze the impact of monetary policy over the period, and find that it has generally been countercyclical, with a few notable exceptions.

PD February 1997. **TI** A Multilateral Approach to Decomposing Volatility in Bilateral Exchange Rates. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 320; Department of Economics, The Faculties, Australian National University, Canberra ACT 0200, Australia. **PG** 23. **PR** no charge. **JE** C33, F31. **KW** Exchange Rates. Unobserved Factors. GMM.

AB Since the advent of floating exchange rate regimes, a stream of literature has emerged characterizing the observed volatility of floating exchange rates in order to consider issues such as "excess" volatility, risk premia and overshooting hypotheses. Rather than following the bulk of the literature in attempting to identify observed causes of volatility, such as money supply shocks, this paper uses a variance decomposition to identify sources of volatility as either unobserved domestic or international factors. Mahieu and Schotman (1994) show that information from a panel of exchange rates can be used to extract information about the factors causing exchange rate volatility. I have generalized their approach to any group of currencies. Using a simple model, exchange rate changes are hypothesized to be due to either unobserved domestic or international factors. Use of a numeraire currency results in the model having a factor common to all exchange rates. Arbitrage conditions enable the contribution of each of these factors to be identified using a GMM estimator. The results show that volatility in the Australian dollar is largely due to the domestic rather than international factors; in contrast to most of six other currencies covered in the study.

Earle, John

PD November 1996. **TI** Ownership Structures, Patterns of Control and Enterprise Behavior in Russia. **AU** Earle, John; Estrin, Saul; Leshchenko, Larisa. **AA** Earle: Central European University and Stanford University. Estrin: London Business School and London School of Economics. Leshchenko: Central European University. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 315; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 64. **PR** no charge. **JE** D21, D23, P52, L60. **KW** Privatization. Russia. Ownership. Enterprise Efficiency.

AB In this paper, we analyze the effects of the massive Russian privatization program on the ownership of Russian firms and on the behavior of formerly state owned enterprises. A large random sample of Russian firms is used to investigate the emerging ownership structures, patterns of control and enterprise behavior. We find that workers have become the dominant owners in a majority of Russian private firms; 65 percent of the total as against 19 percent being manager owned and 16 percent being outsider owned. Higher ownership appears to confer significantly more influence over decision-making on managers and outsiders, but not on workers. Most importantly however, we find no evidence that privatization affects any major area of enterprise behavior or performance.

PD December 1996. **TI** Privatization Versus Competition: Changing Enterprise Behavior in Russia. **AU** Earle, John; Estrin, Saul. **AA** Earle: Central European University and Stanford University. Estrin: London Business School and London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 316; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 36. **PR** no charge. **JE** D73, P52. **KW** Privatization. Competition. Economic Transition.

AB We investigate whether competitive forces and privatization have yet began to play an efficiency-enhancing role in Russia. We also explore the economic effects of harder budget constraints on enterprise behavior. The empirical work is based on a large enterprise panel of Russian firms 1990-94, representing around 10 percent of Russian manufacturing output. We conclude that privatization is having an impact on enterprise efficiency and restructuring but domestic market structure and harder budget constraints for the most part are not. Intriguingly, Russian firms are found to be sensitive to the degree of import penetration.

Easterly, William

TI Inflation's Children: Tales of Crises that Beget Reforms. **AU** Bruno, Michael; Easterly, William.

Eaton, Jonathan

PD February 1996. **TI** Japanese and U.S. Exports and Investment as Conducts of Growth. **AU** Eaton, Jonathan; Tamura, Akiko. **AA** Boston University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5457; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 15. **PR** $5.00. **JE** F21, O11, O19, O41. **KW** Growth. Foreign Investment.

AB The authors develop a simple model of the choice between exploiting a technology in another country via export and via direct foreign investment (DFI). The model points to the destination country's size, level of technological sophistication, and distance from the source as factors in the decision. Moreover, it suggests that the effects of these variables may not only be nonhomogeneous but nonmonotonic as well. The authors use the model as a basis for estimating Japanese and U.S. exports and DFI positions around the world. Consistent with the theory the authors find that the importance of DFI relative to exports grows with population, although, contrary to our theory, the elasticity of DFI, as well as exports, with respect to population is less than one. The authors find that distance tends to inhibit DFI much less than it inhibits exports, as our theory predicts. The authors find some tendency for Japanese exports to rise relative to DFI as countries become more advanced with U.S. exports and DFI exhibiting the opposite tendency. Taking population, per capita income, factor endowments, and distance into account, the authors find Japan to be more open to U.S. exports than any region in the world except East Asia.

Edey, Malcolm

PD September 1996. **TI** Australia's Retirement Income System: Implications for Saving and Capital Markets. **AU** Edey, Malcolm; Simon, John. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia, Research Discussion Paper: 9603; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. **PG** 25. **PR** no charge. **JE** E21, G23, G28, H55, O56. **KW** Superannuation. Retirement Policy. Privatization. National Saving.

AB Australia is in the early stages of introducing a system of self- provision for retirement through mandatory contributions to private superannuation funds. For most employees, the scheme will eventually replace, either fully or partially, the government age pension, currently relied upon by a large majority of retirees. The scheme has been implemented for voluntary superannuation. This paper summaries the historical background of mandatory superannuation in Australia, reviews its potential impact on saving and capital markets, and highlights some remaining policy issues. Perhaps the most important of these is the impact of the system on retirement decisions. A number of features of the system contribute to incentives favouring early retirement and continued reliance on the government pension. Also important is the increasing complexity of the system, a result of the layering of rule changes and grandfathering of existing rights at each stage of the process.

PD October 1996. **TI** Issues in Modelling Monetary Policy. **AU** Edey, Malcolm; Romalis, John. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia, Research Discussion Paper: 9604; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. **PG** 18. **PR** no charge. **JE** E30, E40, E52, O56. **KW** Monetary Policy. Econometric Models. Money. Interest Rates. Inflation.

AB This paper reviews issues in the econometric modeling of monetary policy in the light of recent experience and research. Two main sets of issues are covered: first, the operation of policy including the specification of the instrument and objectives; and second, the transmission of the inherent limitations on the ability to quantify the role of monetary policy in econometric models.

PD October 1996. **TI** The Evolving Structure of the Australian Financial System. **AU** Edey, Malcolm; Gray, Brian. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia, Research Discussion Paper: 9605; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. **PG** 49. **PR** no charge. **JE** G21, G28. **KW** Banks. Banking. Deregulation. Financial Institutions. Funds Management.

AB This paper analyses trends in the Australian financial system since the 1950's. Three important processes of change are described: the interaction between financial innovation and regulatory policy; the process of unbundling of the traditional mix of bank services; and longer-term growth of the funds-management sector. Implications of these trends for competition, market structure and financial regulatory policy are discussed.

Edin, Per-Anders

TI Efficiency Wages and Industry Wages Differentials: A Comparison Across Methods of Pay. **AU** Chen, Paul; Edin, Per-Anders.

Edwards, Sebastian

PD January 1996. **TI** Public Sector Deficits and Macroeconomic Stability in Developing Countries. **AA** The World Bank and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5407; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 34. **PR** $5.00. **JE** E62, H55, O54. **KW** Chile. Social Security. Argentina. Public Spending. Political Economy.

AB This paper analyzes Latin America's experience with fiscal adjustment during the last decade. The paper discusses in detail how some countries -- most notably Argentina, Chile and Mexico -- were successfully able to eliminate their fiscal deficits in a relatively short period of time. Their experiences with tax reform and expenditure reduction are analyzed, and some political economy angles of the fiscal adjustment process are emphasized. The paper also discusses the interaction between privatization and fiscal provided. An analysis of the relationship between social security systems and fiscal imbalances is provided. In particular, the Chilean pension system reform -- which replaced an insolvent and inefficient pay-as-you-go system with a fully funded one administered by private companies --is analyzed in some detail. The paper concludes with a discussion of the main lessons from the Latin American reforms of the transitional economies and other reforming countries.

Eichberger, Jurgen

PD March 1996. **TI** E-Capacities and the Ellsberg Paradox. **AU** Eichberger, Jurgen; Kelsey, David. **AA** Eichberger: Universitat des Saarlandes. Kelsey: University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/13; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 25. **PR** 2 pounds; no charge to students. **JE** C72, D81. **KW** Ellsberg Paradox. Uncertainty Aversion. Choquet Integral.

AB Ellsberg's (1961) famous paradox shows that decision-makers give events with "known" probabilities a higher weight in their outcome evaluation. In this same article, Ellsberg (1961) suggests a preference representation which has intuitive appeal but lacks an axiomatic foundation. Schmeidler (1989) and Gilboa (1987) provide an axiomatization for expected utility with non-additive probabilities. This paper introduces E-capacities as a representation of beliefs which incorporates objective information about the probability of events. It can be shown that the Choquet integral of an E-capacity is the Ellsberg representation. The paper further explores properties of this representation of beliefs and provides an axiomatization for them.

PD March 1996. **TI** Free Riders Do Not Like Uncertainty. **AU** Eichberger, Jurgen; Kelsey, David. **AA** Eichberger: Universitat des Saarlandes. Kelsey: University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/14; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 24. **PR** 2 pounds; no charge to students. **JE** D81, H41. **KW** Public Goods. Uncertainty Aversion. Knightian

Uncertainty. Choquet Integral. Free-Rider.
AB We examine the effect of introducing Knightian uncertainty into a simple model of public good provision. We find that uncertainty may reduce the free-rider problem if utility is concave in public goods or there are decreasing returns to scale in the production of public goods. It is possible that free-riding may be less in a large society. We argue that our results are compatible with the experimental evidence.

Eichenbaum, Martin

TI Sticky Price and Limited Participation Models of Money: A Comparison. **AU** Christiano, Lawrence J.; Eichenbaum, Martin; Evans, Charles L.

Elbasha, Elamin H.

PD February 1995. **TI** On Endogenous Growth: The Implications of Environmental Externalities. **AU** Elbasha, Elamin H.; Roe, Terry L. **AA** University of Minnesota. **SR** University of Minnesota Economic Development Center Bulletin: 95/01; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 42. **PR** no charge. **JE** F11, O31, O41, Q20. **KW** Endogenous Growth. Environment. Innovation. Trade.
AB This paper uses an endogenous growth model to examine the interaction between trade, economic growth, and the environment. We find that whether trade enhances or retards growth depends on the relation between factor intensities of exportable, importable, and R&D and the relative abundance of the factor R&D uses more intensively. Depending on the intertemporal elasticity of substitution, the long-run rate of economic growth changes with environmental externalities. Concerns about the environment can explain a significant part of cross-country difference in growth rates. For the empirically reported range of the elasticity of intertemporal substitution, countries which care more about the environment grow faster. The effects of trade on the environment and welfare depend on the elasticities of supply for the two traded goods, the terms of trade effect on growth, and pollution intensities. The decentralized and Pareto optimal growth rates are, in general, different. The market growth rate is bigger than the optimal rate the larger the degree of monopoly power in the innovation sector and the stronger the effects of environmental externalities. The policy implications of this divergence are discussed. We also consider numerical exercises to broaden the insights from the analytical results and allow for incorporating pollution abatement.

PD September 1995. **TI** Environment in Three Classes of Endogenous Growth Models. **AU** Elbasha, Elamin H.; Roe, Terry L. **AA** University of Minnesota. **SR** University of Minnesota Economic Development Center Bulletin: 95/06; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 35. **PR** no charge. **JE** O31, O41, Q20. **KW** Endogenous Growth. Environment. Human Capital. Innovation. Research and Development.
AB The implications of environmental externalities are studied within three classes of endogenous growth models viz. the linear technology models, the human capital models, and the R&D and innovation models. The long-run rate of economic growth changes when environmental externalities are introduced; the direction of change depends on the severity of externalities and the intertemporal elasticity of substitution. The presence of environmental externalities cause the decentralized growth rate to diverge from the efficient rate. Which rate is bigger than the other depends, among other things, on the valuation of consumption relative to environmental quality. Several policy changes to align the two paths are discussed. The models are calibrated to U.S. data.

TI A Dynamic CGE Model: An Application of R&D-Based Endogenous Growth Model Theory. **AU** Diao, Xinshen; Elbasha, Elamin H.; Roe, Terry L.; Yeldan, Erinc.

Ellison, Sara Fisher

PD August 1996. **TI** Characteristics of Demand for Pharmaceutical Products: An Examination of Four Cephalosporins. **AU** Ellison, Sara Fisher; Cockburn, Iain; Griliches, Zvi; Hausman, Jerry. **AA** Ellison: Massachusetts Institute of Technology. Hausman: Massachusetts Institute of Technology and National Bureau of Economic Research. Cockburn: University of British Columbia and National Bureau of Economic Research. Griliches: Harvard University and National Bureau of Economic Research. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 96/24; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 40. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** D12, L65. **KW** Pharmaceuticals. Demand System. Multistage Budgeting.
AB In this paper we model demand for four cephalosporins and compute own- and cross-price elasticities between branded and generic versions of the four drugs. We model demand as a multistage budgeting problem, and argue that such a model is appropriate to the multistage nature of the purchase of pharmaceutical products, in particular, the prescribing and dispensing stages. We find quite high elasticities between generic substitutes and also significant elasticities between some therapeutic substitutes.

Endres, A. M.

TI Monetary Policy and the Business Cycle: The View from Geneva in the 1920s. **AU** Fleming, G. A.; Endres, A. M.

Engel, Charles

PD December 1995. **TI** Accounting for U.S. Real Exchange Rate Changes. **AA** University of Washington and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5394; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 22. **PR** $5.00. **JE** F31, F11. **KW** Foreign Exchange. PPP.
AB This study measures the proportion of U.S. real exchange rate movements that can be accounted for by movements in the relative prices of non-traded goods. The decomposition is done at all possible horizons that the data allow -- from one month up to thirty years. The accounting is performed with five different measures of non-traded goods prices and real exchange rates, for exchange rates of the U.S. relative to a number of other high income countries in each case. The outcome is surprising - - relative prices of non-traded goods appear to account for essentially none of the movement of U.S. real exchange rates at any horizon. Only for one crude measure, which uses the aggregate producer price index as an index of traded goods prices, do non-traded prices seem to account for more than tiny portion or real exchange rate changes.

PD December 1995. **TI** Regional Patterns in the Law of One Price: The Roles of Geography vs. Currencies. **AU** Engel, Charles; Rogers, John H. **AA** Engel: University of Washington and National Bureau of Economic Research. Rogers: Board of Governors of the Federal Reserve System. **SR** National Bureau of Economic Research Working Paper: 5395; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 32. **PR** $5.00. **JE** F14, F11, F31. **KW** One Price. Trade. Sticky Prices. Volatility.

AB The authors find evidence that the law of one price (LOOP) holds more nearly for country pairs that are within geographic regions than for country pairs that are not. These findings are established using disaggregated consumer price data from 23 countries (including data from eight North American cities). The authors find that failures of LOOP are closely related to nominal exchange rate variability, suggesting a link to sticky nominal prices. The authors also find that distance can explain failures of LOOP, suggesting the failures arise from imperfect market integration. However, these two sources do not explain all of the failure of LOOP. The authors speculate that integrated marketing and distribution systems within regions cause LOOP to hold more nearly intraregionally. The authors present a formal model of marketing and distribution to illustrate this hypothesis.

Ermisch, John F.

PD December 1996. **TI** Parental Support for Human Capital Investment by Young Adults. **AA** University of Essex. **SR** Centre for Economic Policy Research Discussion Paper: 1536; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 22. **PR** 4 pounds or $8.00. **JE** D12, I22, J12. **KW** Intergenerational Transfers. Human Capital. Coresidence.

AB The paper develops two models in which parents support their adult child's human capital investment through financial transfers and/or coresidence. In one, parents are altruistic, and in the other they make loans to children for purely selfish reasons. Econometric estimates using the first four waves of the British Household Panel Study lend more support to the altruistic motivation for support and indicate substitution between the two kinds of support.

Estrin, Saul

TI Ownership Structures, Patterns of Control and Enterprise Behavior in Russia. **AU** Earle, John; Estrin, Saul; Leshchenko, Larisa.

TI Privatization Versus Competition: Changing Enterprise Behavior in Russia. **AU** Earle, John; Estrin, Saul.

Evans, Charles L.

TI Sticky Price and Limited Participation Models of Money: A Comparison. **AU** Christiano, Lawrence J.; Eichenbaum, Martin; Evans, Charles L.

Evans, Robert

PD June 1996. **TI** Common Supply, Collusion and Entry Deterrence. **AA** University of Cambridge. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP31; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 27. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** D21, D43, L10. **KW** Collusion. Vertical Restraints. Exclusive Dealing. Re-Negotiation.

AB The paper analyzes a model in which two upstream firms compete to offer price contracts to two downstream firms. If one upstream firm has a first-mover advantage there is a unique equilibrium outcome: that firm excludes the other and earns the monopoly profit. This is achieved by negotiating exclusive-dealing two-part tariff contracts with price ceilings. If there is no first-mover advantage there are also equilibria in which the downstream firms collude by coordinating on a common supplier. The latter are the only stationary equilibria involving two- part tariffs with price no lower than marginal cost. Despite the possibility of private renegotiation, apparently innocuous contracts can, through their commitment value, have anti-competitive effects.

Evans, William N.

TI Schooling and Labor Market Consequences of the 1970 State Abortion Reforms. **AU** Angrist, Joshua D.; Evans, William N.

Ewing, Keith

TI Inflation, Economic Performance and Employment Rights. **AU** Deakin, Simon; Ewing, Keith.

Faini, Riccardo

PD December 1996. **TI** Where do Migrants Go? Risk-Aversion, Mobility Costs and the Locational Choice of Migrants. **AU** Faini, Riccardo; Daveri, Francesco. **AA** Universita degli Studi di Brescia. **SR** Centre for Economic Policy Research Discussion Paper: 1540; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 16. **PR** 4 pounds or $8.00. **JE** J61, O15. **KW** Migration. Risk Diversification. Bunching.

AB As part of their effort to pool individual risk, households consider spreading their members over a plurality of locations, both inside and outside their country of origin. At the same time, the world is ridden with "Chinatowns" and "Little Italies": people, whenever they move, tend to bunch in the same location. Bunching would appear fundamentally at odds with the desire to diversify risk. In this paper we provide a framework to reconcile both spatial bunching and the spread of migrants, combining risk-aversion and concavity of mobility costs at the household level. Evidence from Southern Italy is consistent with the main predictions from our model.

Fair, Ray C.

PD August 1996. **TI** Estimated Inflation Costs: Had European Unemployment Been Reduced in the 1980s by Macro Policies? **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1129; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 16. **PR** no charge. **JE** E31. **KW** Unemployment. Inflation. Europe.

AB This paper uses a multicountry model to estimate the inflation costs had European unemployment been lowered in the 1982:1-1990:4 period by macro policies. A "non NAIRU" framework is proposed for thinking about these costs.

Falvey, Rod

PD February 1997. **TI** Trade Shocks and the Magnitude of Transmitted Wage Adjustments. **AU** Falvey, Rod; Tyers, Rod; McDougall, Robert. **AA** Falvey: University of Nottingham. Tyers: Australian National University. McDougall: Purdue University. **SR** Australian National University Working Paper in Economics and Econometrics: 318; Department of Economics, The Faculties, Australian National University, Canberra ACT 0200, Australia. **PG** 15. **PR** no charge. **JE** F11, F17. **KW** Trade. Wages. General Equilibrium.

AB In recent years there has been increasing interest in the tendency either for the wage paid to unskilled labor to decline or for the rate of unemployment to rise in developed countries. A number of explanations have been canvassed, including two that emphasize the microeconomy. First, economic growth and trade liberalization since the 1970's has led to rapid growth in exports from many developing economies. This surge in developed country imports of mostly labor-intensive goods may have caused their industries intensive in unskilled labor, and hence the derived demand for such labor, to contract. Theoretical models suggest that trade reforms may yield convergence across countries in some factor rewards. Yet attempts to apportion contributions have thus far concluded that the effects of trade changes are comparatively small and that a second explanation has the major role to play, namely technological change which is saving in unskilled labor. This paper employs a global general equilibrium framework and sensitivity analysis to examine why it is that shocks in one country appear to transmit to cooperatively small changes in real factor rewards in its trading partner(s).

Fan, Yanqin

TI Some Higher Order Theory for a Consistent Nonparametric Model Specification Test. **AU** Linton, Oliver B.; Fan, Yanqin.

Fauli-Oller, Ramon

PD November 1996. **TI** Mergers for Market Power in a Cournot Setting and Merger Guidelines. **AA** Universitat d'Alacant. **SR** Centre for Economic Policy Research, Discussion Paper: 1517; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 18. **PR** 4 pounds or $8.00. **JE** G34, L11. **KW** Mergers. Welfare.

AB The U.S. Merger Guidelines consider that the anticompetitive effect of a horizontal merger is increasing in the initial market concentration and decreasing in the elasticity of demand. These ideas are studied in a setting where identical firms compete a la Cournot and marginal cost is constant. The former relationship holds if demand is convex, but it may fail to be true if demand is concave. The latter condition holds only if the elasticity of demand is increasing in the degree of concavity. This is satisfied by linear demands, constant elasticity demands, and demands that are log-linear in price.

Favero, Carlo

PD January 1996. **TI** High Yields: The Spread on German Interest Rates. **AU** Favero, Carlo; Giavazzi, Francesco; Spaventa, Luigi. **AA** Favero: Universita L. Bocconi. Giavazzi: Universita L. Bocconi and National Bureau of Economic Research. Spaventa: Universita degli studi di Roma. **SR** National Bureau of Economic Research Working Paper: 5408; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** $5.00. **JE** E43, D84, G12. **KW** Germany. Term Structure. Italy. Spain. Europe. Interest Rates.

AB This paper is a first attempt at evaluating the determinants of the total interest rate differentials on government bonds between high yielders, namely Italy, Spain, Sweden and Germany. In particular the authors address the question of the relative importance of local and global factors in the determination of such spreads. The authors identify and measure two components of total yield differentials: one due to expectations of exchange rate depreciation -- which the authors call the exchange factor -- another which reflects the market assessment of default risk. The authors propose and discuss a measure of the exchange rate factors and of the default risk premium based on interest rate swaps. Overall our investigation provides strong evidence in favor of the existence of a common trend for the Italian and Spanish spreads on Bunds, which in not shared by the Swedish spread. Such a trend is driven by international factors and is independent from country-specific shocks. Country-specific shocks are only relevant in explaining short term cycles around the common stochastic trend.

Fazzari, Steven M.

PD February 1996. **TI** Financing Constraints and Corporate Investment: Response to Kaplan and Zingales. **AU** Fazzari, Steven M.; Hubbard, R. Glenn; Petersen, Bruce C. **AA** Fazzari and Petersen: Washington University. Hubbard: Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5462; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 34. **PR** $5.00. **JE** E22, G32, E51. **KW** Financing Constraints. Credit. Investment.

AB Kaplan and Zingales (1995, hereafter KZ) criticize Fazzari, Hubbard and Petersen (1998, hereafter FHP) and much ensuing research that uses cross-sectional differences in firm behavior to test for financing constraints on investment. This reply identifies flaws in the KZ analysis. The questions KZ raise have been considered extensively and rigorously in the literature (most of which is not addressed in KZ), with results broadly similar to those of FHP. The authors also challenge both of KZ's main results. First, their finding that most of the FHP firms are not financially constrained relies on an inappropriate operational definition of what it means to be constrained. Second, the KZ regression results (lower sensitivity of investment to cash flow for firms classified as constrained than for those classified as unconstrained) are uninformative. Finally, econometric problems affect the interpretation of the KZ regressions. The authors conclude that the KZ findings do not contradict the interpretation of the empirical results in FHP and subsequent research.

Feenstra, Robert C.

PD January 1996. **TI** Globalization, Outsourcing, and Wage Inequality. **AU** Feenstra, Robert C.; Hanson, Gordon H. **AA** Feenstra: University of California, Davis and National Bureau of Economic Research. Hanson: University of Texas and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5424; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 8. **PR** $5.00. **JE** D31, J31, F21, F11. **KW** Trade. Skills. Inequality. Outsourcing.

AB There is considerable debate over whether international trade has contributed to the declining economic fortunes of less skilled workers. One issue that has become lost in the current discussion is how firms respond to import competition and how these responses, in turn, are transmitted to the labor market. In previous work, the authors have argued that if firms respond to import competition from low-wage countries by moving non-skill-intensive activities abroad, then trade will shift employment towards skilled workers within industries. In this paper, the authors extend our previous work by combining new import data from the revised NBER trade database with disaggregated data on input purchases from the Census of Manufacturers. The main finding is that outsourcing can account for 31-51 percent of the increase in the relative demand for skilled labor that occurred in U.S. manufacturing industries during the 1980's.

TI Protectionist Threats and Foreign Direct Investment. **AU** Blonigen, Bruce A.; Feenstra, Robert C.

Feldstein, Martin

PD December 1995. **TI** The Effect of a Consumption Tax on the Rate of Interest. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5397; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** $5.00. **JE** H24, E21, E43. **KW** Tax Reform. Interest Rates. Consumption.

AB This paper analyzes the ways in which substituting a consumption tax for the existing personal and corporate income taxes would affect equilibrium pretax interest rates. The analysis indicates that whether the pretax rate of interest rises or falls depends on the strength of the personal saving response, the nature of the capital market equilibrium between debt and equity yields, and the response of the owner-occupied housing sector. A formal two-sector model with endogenous saving, housing and corporate capital is presented. With plausible parameter values, the analysis suggests that the shift from an income tax to a consumption tax is more likely to raise rates than to lower them.

PD January 1996. **TI** The Missing Piece in Policy Analysis: Social Security Reform. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5413; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** $5.00. **JE** H55, I38, H21, J22. **KW** Social Security. Labor Supply. Incentives. Deadweight Loss.

AB This lecture discusses the economic losses that result from an unfunded social security retirement system an the potential gain from shifting to a funded system. The social security payroll tax distorts labor supply and the form in which compensation is paid. The resulting deadweight loss is approximately one percent of each year's GDP in perpetuity. Even more important is the loss of investment income that results from forcing employees to accept the low implicit return of an unfunded program rather than the much higher return on real capital that would be paid on private saving or in a funded social security program. Recognizing the existing unfunded obligation only makes that piece of the national debt explicit. But shifting to a funded program limits the crowding out of capital formation to the amount that has already occurred. Future increases in annual saving that automatically result from economic growth are able to earn the higher rate of return on real capital. The present value of these gains is equivalent to a perpetuity of more than two percent of GDP a year. The combination of the improved labor market incentives and the higher real return on saving has a net present value gain of more than $15 trillion, an amount equivalent to three percent of each future year's GDP forever.

PD February 1996. **TI** The Costs and Benefits of Going from Low Inflation to Price Stability. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5469; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 52. **PR** $5.00. **JE** D61, E31, E22, H21. **KW** Capital Gains. Dividends. Inflation. Welfare.

AB This paper evaluates the welfare gain from achieving price stability and compares it to the cost of the transition. In calculating the gain from price stability, the paper emphasizes the distortions caused by the interaction of inflation and capital income taxes. Because inflation exacerbates the tax distortions that would exist even with price stability, the annual deadweight loss of a two percent inflation rate is a surprisingly large one percent of GDP. Since the real gain from shifting to price stability grows in perpetuity at the rate of growth of GDP, its present value is a substantial multiple of this annual gain. Discounting the annual gains at the rate that investors require for risky equity investments (i.e., at the 5.1 percent real net-of-tax rate of return on the Standard and Poors portfolio of equities from 1970 to 1994) implies a present value gain equal to more than 35 percent of the initial level of GDP. Since the estimated cost of shifting from two percent inflation to price stability is about five percent of GDP, the gain substantially outweighs the cost of transition.

Fender, John

PD March 1996. **TI** Educational Choice, Credit Constraints and Public Policy in an Overlapping Generations Framework. **AU** Fender, John; Wang, Ping. **AA** Fender: University of Birmingham. Wang: Pennsylvania State University. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/16; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 26. **PR** 2 pounds; no charge to students. **JE** E62, H52. **KW** Education. Credit Rationing. Endogenous Growth.

AB This paper develops a two-period overlapping generations model where agents choose whether to become educated when young. While education enhances productivity, it needs to be financed by borrowing. Because of the possibility of default, lenders may ration credit. We characterize the steady-state equilibrium with and without credit constraints and show that credit rationing tends to discourage education and raise the real rate of interest. We examine the role of public policy in remedying the social inefficiency caused by credit rationing; specifically, we consider a public subsidy to education and public provision of education under two alternative financing schemes. The model is then modified to consider human capital externalities and to generate endogenous growth. Several conclusions of interest concerning education choice, economic growth, real interest rate movements, policy effectiveness and welfare emerge.

PD May 1997. **TI** A General Equilibrium Model of

Crime and Punishment. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 97/06; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 24. **PR** 2 pounds; no charge to students. **JE** D72, K42. **KW** Crime. Multiple Equilibria. Inequality. Punishment.

AB A model of crime and punishment is developed where individuals who differ in their earnings abilities choose rationally between work and crime, taking the probability and consequences of punishment into account. This generates an aggregate relationship between the probability of punishment and the level of crime. There is also a relationship between enforcement spending, the number of criminals and the number of punished. In such an economy, the possibility of multiple equilibria and the effects of changes in enforcement spending and in inequality on the levels of crime and punishment are discussed; there is also discussion of social welfare and voting behavior.

Fernald, John G.

TI Aggregate Productivity and the Productivity of Aggregates. **AU** Basu, Susanto; Fernald, John G.

Fernie, Sue

PD May 1996. **TI** It's Not What You Pay It's the Way That You Pay It and That's What Get Results: Jockey's Pay and Performance. **AU** Fernie, Sue; Metcalf, David. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 295; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 27. **PR** no charge. **JE** J33, M12. **KW** Payment Systems. Monitoring. Performance. Jockeys.

AB Management scholars and economists have recently set out the principles underlying the "ideal" payment system to elicit good performance by aligning the interests of the principal and agent. Such a system involves an incentive contract, reputation and certain organizational arrangements. We analyze pay and performance in an occupation -- jockeys -- where the payment system for most individuals is congruent with the theoretical ideal. We are able to do this because, most unusually, a measure of pure individual performance exists for an unbalanced panel of some 50 individuals for eight years. Pay and performance go hand-in-hand and the sensitivity of changes in compensation to changes in performance is substantially larger than that found in many corresponding studies where the payment system is not ideal. By contrast, an alternative payment mechanism involving very large non-contingent payments for a few individuals does not generate good performance. Comparisons are also made with pay-performance relationships in other areas, including executive compensation. Our evidence suggests that "it's not what you pay it's the way that you pay it...and that's what gets results.".

Fielding, Antony

PD October 1995. **TI** On Scoring Ordered Classifications. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/10; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 30. **PR** 2 pounds; no charge to students. **JE** C10. **KW** Ordered Classifications. Scoring Functions. Optimal Scaling. Canonical Scores. Convexity Theorems.

AB Methods for scoring ordered classifications in statistical analysis are reviewed. These contrast with model based approaches through generalized linear models. The practical empirical advantages of scoring functions are developed. It is suggested that conditional mean scoring under assumed distributional forms has an intuitive appeal. Extensions to axiom based criteria for scoring functions are suggested. Their form is suggested by a convexity theorem and this is extended to other useful properties. These are shown to be satisfied by conditional mean scoring. Applications are discussed and attention is drawn to parallel work on compounded functions of proportions.

Finegan, T. Aldrich

TI Changes in the Distribution of Wages, 1940-1950: The Public vs. The Private Sector. **AU** Margo, Robert A.; Finegan, T. Aldrich.

Fingleton, John

PD December 1996. **TI** Competition Among Middlemen When Buyers and Sellers can Trade Directly. **AA** Trinity College. **SR** Centre for Economic Policy Research Discussion Paper: 1538; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 29. **PR** 4 pounds or $8.00. **JE** D40, G20, L12.. **KW** Middleman. Intermediation. Monopolization.

AB This paper examines how the introduction of a direct trade alternative for buyers and sellers affects competition among middlemen. Direct trade makes middlemen's supply and demand functions depend on both bid and ask prices, a feature we term interdependence. A simple model is used to illustrate this phenomenon and to show how interdependence effects depend on the efficiency of direct trade. We find that direct trade does not alter Stahl's (1988) finding that middlemen may "corner" the market. This occurs under different conditions and with smaller distortions if there is an active direct trade possibility for sellers and buyers, however.

PD December 1996. **TI** Competition Between Intermediated and Direct Trade and the Timing of Disintermediation. **AA** Trinity College. **SR** Centre for Economic Policy Research Discussion Paper: 1539; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 23. **PR** 4 pounds or $8.00. **JE** C78, D49, O12. **KW** Middleman. Intermediation. Disintermediation.

AB This paper analyses competition between direct and intermediated trade. We show that middlemen's supply and demand depend on both their bid and ask prices if sellers and buyers have the alternative of trading directly. Multiplicity also prevails. Direct trade does not constrain the market power of middlemen unless it is frictionless. Our results suggest that the timing of disintermediation is likely to be sub-optimal and have implications, more generally, for the analysis of many financial and food markets, where parallel or alternative trade channels for the same good exist.

Fisher, Anthony

PD February 1997. **TI** Investment Under Uncertainty and Option Value in Environmental Economics. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 813; 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** 11. **PR** 25 cents per page domestic; 50 cents per page foreign. **JE** Q31. **KW** Investments. Risk. Option Value. Environmental Economics.

AB The concept of option value due to Arrow and Fisher, Henry, and Hanemann (AFHH), in the environmental literature, is what was originally called quasi-option value by Arrow and Fisher to distinguish it from another concept of option value first developed by Cicchetti and Freeman (1971) and later discussed in detail by many other authors, summarized in Hanemann (1989). This paper presents the most basic formulation of the AFHH and then presents a similarly basic version of the Dixit- Pindyck model of the investment decision under uncertainty and irreversibility. The main section of the paper demonstrates that these two models are formally equivalent. Part of the benefit of this exercise is a contribution to the intellectual history of environmental economics and its relation to the broader discipline. Perhaps more important is the "license" given to environmental and resource economists working in the AFHH tradition to adapt results from the much more extensive body of work set out in Dixit and Pindyck, including the theory of call options in finance, which they show is in turn equivalent to their theory of investment under uncertainty.

Flanders, M. June

PD November 1996. **TI** Left-and Right-Endogenous Money: A Tale of Two Books: Steven Horwit, Monetary Evolution, Free Banking, and Economic Order and L. Randall Wray, Money and Credit in Capitalist Economies; the Endogenous Money Approach. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Report: RR/9615; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. **PG** 22. **PR** $10.00. **JE** E40. **KW** Endogenous Money.

AB This paper discusses two books on endogenous money. From many points of view they are remarkably alike: both take a historical, evolutionary view of money and its endogenous development; both compare this view of money with that of the classical and neoclassical economists. Both are willing to stray from the straight and narrow path of "conventional" economics and compare the development of money to the growth of language, viewing it as an essential element in the evolution of market -- viz. capitalistic -- economies. Both reject the walrasian notion of a neutral veil over tatonnement processes, that is, they both reject the view that money is an add-on, superimposed on a functioning enterprise. They both combine and reject the classicals, neoclassicals, general equilibrium writers, and monetarists. Both take a dynamic, evolutionary, historical approach. They share the dubious honor of being treated, with varying degrees of tolerance, as eccentrics by the mainstream of the profession. And yet, they end up facing each other, in opposition, 180 degrees apart. This paper discusses their arguments and concludes that what determines their relative positions at the finishing gate is their relative position at the starting posts and what is different about them is their faith.

Fleming, G. A.

PD September 1996. **TI** Monetary Policy and the Business Cycle: The View from Geneva in the 1920s. **AU** Fleming, G. A.; Endres, A. M. **AA** Fleming: Australian National University. Endres: University of Auckland. **SR** Australian National University Working Paper in Economics and Econometrics: 311; Department of Economics, The Faculties, Australian National University, Canberra ACT 0200, Australia. **PG** 27. **PR** no charge. **JE** B22, E52. **KW** Monetary Policy. Targeting. Stabilization Policy.

AB The research program developed by economists at the ILO-League of Nations in the 1920's constitutes a substantive precursor to modern discussions on the role of monetary policy and the status of the price stability norm in particular. A combination of theory and empirical work formed the basis of a monetary approach to the business cycle developed in Geneva. The proposed policy of price level stabilization presumed that an elastic target of price stability was a necessary and sufficient condition for (eventual) high and stable employment. The instruments, indicator variables and "rules" of the proposed regime are examined. The Geneva economists founded their arguments on, among other things, politically independent but internationally collaborative central banks, and consistent use of a range of data sources in the conduct of monetary policy. Over time the reputation and credibility of monetary authorities would then be enhanced. In the evolution of the monetary policy "rules" versus "discretion" debate, the contribution of the Geneva economists should be accorded a central place.

Francesconi, Marco

TI Job Tenure: Does History Matter? **AU** Booth, Alison L.; Francesconi, Marco; Garcia-Serrano, Carlos.

Francois, Joseph F.

PD December 1996. **TI** The Multilateral Trade Agenda: Uruguay Round Implementation and Beyond. **AU** Francois, Joseph F.; McDonald, Bradley. **AA** Francois: Erasmus University Rotterdam. McDonald: World Trade Organization. **SR** Centre for Economic Policy Research Discussion Paper: 1533; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 32. **PR** 4 pounds or $8.00. **JE** F13, F47. **KW** World Trade Organization. Uruguay Round. Trade Liberalization.

AB In this paper we provide a quantitative examination of initiatives for post-Uruguay Round liberalization in "traditional" GATT/WTO market access areas, as a counterpoint to the recent policy literature on newer issues such as the environment, competition policy, and labor standards. We emphasize issues such as industrial tariff liberalization, agricultural trade liberalization, recent proposals for free trade in information technologies, and an expanded Agreement on Government Procurement, along with the benefits of fully implementing the Uruguay Round Agreements. We provide a quantitative assessment of the relative magnitudes of various liberalization proposals using a computable model of the global economy.

Frankel, Jeffrey A.

PD January 1996. **TI** How Well Do Foreign Exchange Markets Function: Might a Tobin Tax Help? **AA** University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5422; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website:

www.nber.org. **PG** 41. **PR** $5.00. **JE** F31, H21, H87. **KW** Tobin Tax. Foreign Exchange. Volatility.
AB Figures for 1995 estimate trading by dealers in the foreign exchange market at over $1,200 billion per day, most of it with other dealers. Some have linked this volume to concerns of excessive volatility in the market. Tobin's proposal to address this volatility with a small tax on all foreign exchange transactions has not received the serious attention it deserves. The paper argues that a better case can be made for the proposition that the tax might dampen exchange rate volatility than most economists believe. Calculations show that the tax, unlike some forms of capital control, would fall far more heavily on short-term transactions than long-term. Survey data and a simple model suggest, in turn, that short-term activity can be destabilizing. The paper also offers crude estimates of the revenue that would be raised from the Tobin tax. It is left to other authors to examine a major shortcoming of the proposal, enforceability.

PD January 1996. **TI** Regional Trading Arrangements: Natural or Super-Natural? **AU** Frankel, Jeffrey A.; Stein, Ernesto; Wei, Shang-Jin. **AA** Frankel: University of California, Berkeley. Stein: Inter-American Development Bank. Wei: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5431; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 10. **PR** $5.00. **JE** F13, F15, R13, D72. **KW** Trade. Liberalization. Regional Integration. Tariffs.
AB This paper summarizes recent research by the authors on the effects of free trade areas (FTA's). Within our model, which emphasizes inter- continental transport costs, several conclusions arise: (1) FTA's are likely to be detrimental over a moderate range of parameter values, even if drawn along natural regional lines. (2) A small margin of preferences for neighbors is beneficial. (3) Optimal preferences depend on the parameters, particularly on transport costs. (4) If preferences are raised further, they enter the zone of negative returns to regionalization, and eventually the super-natural zone, where welfare is lower than under the MFN status quo. Estimates from the gravity model suggest the world system may already be in the super-natural zone. The core model leaves out many factors, but the authors have pursued a variety of extensions by now. Perhaps the two most important involve generalizing the highly stylized model of trade (to include factor endowments), and relaxing the assumption that the inter-bloc level of tariffs remains fixed. In the latter case, allowing tariffs to be endogenous yields a much more optimistic outlook for the effects of FTA's.

PD January 1996. **TI** Currency Crashes in Emerging Markets: Empirical Indicators. **AU** Frankel, Jeffrey A.; Rose, Andrew K. **AA** University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5437; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 21. **PR** $5.00. **JE** F31, F34, F43, F21. **KW** Growth. Currency Crisis. Depreciation. Debt. FDI. Foreign Investment.
AB The authors use a panel of annual data for over one hundred developing countries from 1971 through 1992 to characterize currency crashes. The authors define a currency crash as a large change of the nominal exchange rate that is also a substantial increase in the rate of change of nominal depreciation. The authors examine the composition of the debt as well as its level, and a variety of other macroeconomic factors, external and foreign. Crashes tend to occur when: output growth is low; the growth of domestic credit is high; and the level of foreign interest rates is high. A low ratio of FDI to debt is consistently associated with a high likelihood of a crash.

PD March 1996. **TI** Trade and Growth: An Empirical Investigation. **AU** Frankel, Jeffrey A.; Romer, David. **AA** University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5476; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** $5.00. **JE** F11, R11, R12. **KW** Trade. Geography. Instrumental Variables. Growth.
AB Countries' geographic characteristics have important effects on their trade, and are plausibly uncorrelated with other determinants of their incomes. This paper therefore constructs measures of the geographic component of countries' trade and uses those measures to obtain instrumental variables estimates of the effect of trade on income. The results suggest that ordinary least squares estimates understate the effects of trade, and that trade has a quantitatively large, significant, and robust positive effect on income.

Freeman, R.

TI Growing Into Work. **AU** Blanchflower, David; Freeman, R.

Freeman, Richard B.

PD January 1996. **TI** Working for Nothing: The Supply of Volunteer Labor. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5435; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** $5.00. **JE** D64, J22. **KW** Volunteering. Labor Supply. Altruism.
AB Volunteer activity is work performed without monetary recompense. This paper shows that volunteering is a sizable economic activity in the U.S.; that volunteers have high skills and opportunity costs of time; that standard labor supply explanations of volunteering account for only a minor part of volunteer behavior; and that many volunteer only when requested to do so. This suggests that volunteering is a "conscience good or activity" -- something that people feel morally obligated to do when asked, but which they would just as soon let someone else do.

TI Relational Investing: The Worker's Perspective. **AU** Lazear, Edward P.; Freeman, Richard B.

PD February 1996. **TI** Why Do So Many Young American Men Commit Crimes and What Might The Authors Do About It? **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5451; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** $5.00. **JE** K42, D11, D12. **KW** Crime. Deterrence. Enforcement. Prison.
AB This paper shows that participation in crime and involvement with the criminal justice system has reached extraordinary levels among young men. With approximately 2 percent as many men incarcerated as in the labor force, the crime rate should have plummeted. It didn't. Evidence suggests

that the depressed labor market for low skill American workers contributed to the continued high level of crime by less educated men, despite incapacitation and the deterrent effect of imprisonment. The costs of incarceration are such that even marginally effective prevention policies can be socially desirable.

TI Searching for the Effect of Immigration on the Labor Market. **AU** Borjas, George J.; Freeman, Richard B.; Katz, Lawrence F.

Freris, Andrew F.

TI The Short-Run Performance of Initial Public Offers: New Results Using a Dynamic Beta Model. **AU** Blake, David; Freris, Andrew F.

Friedman, Benjamin M.

PD February 1996. **TI** The Rise and Fall of Money Growth Targets as Guidelines for U.S. Monetary Policy. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5465; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** $5.00. **JE** E52, E58, E42. **KW** Monetary Policy. K-Percent Rule. Monetarism. Interest Rates.

AB A familiar question raised by the Federal Reserve System's evolving use of money growth targets over the past twenty years is whether monetary policymakers had sound economic reasons for changing their procedures as they did -- either in adopting money growth targets in the first place, or in subsequently abandoning them, or in both instances. This paper addresses that question by comparing two kinds of evidence based on U.S. time-series data: first, evidence bearing on what Federal Reserve policymakers should have known about the relationship of money to income and prices; and second, evidence showing how and when the Federal Reserve changed its actual (as opposed to stated) reliance on money growth targets. The main conclusion from this comparison is that whatever economic conditions might have warranted reliance on money growth targets in the 1970's and early 1980's had long disappeared by the 1990's,. Whether adopting money growth targets earlier on was likewise appropriate is less clear.

Froot, Kenneth A.

PD January 1996. **TI** Risk Management, Capital Budgeting and Capital Structure Policy for Financial Institutions: An Integrated Approach. **AU** Froot, Kenneth A.; Stein, Jeremy C. **AA** Froot: Harvard University and National Bureau of Economic Research. Stein: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5403; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** $5.00. **JE** G21, G32, D81. **KW** Futures. Banks. Risk. Uncertainty.

AB The authors develop a framework for analyzing the capital allocation and capital structure decisions facing financial institutions such as banks. Our model incorporates two key features: i) value-maximizing banks have a well-founded concern with risk management; and ii) not all the risks they face can be frictionlessly hedged in the capital market. This approach allows us to show how bank-level risk management considerations should factor into the pricing of those risks that cannot be easily hedged. The authors examine several applications, including the evaluation of proprietary trading operations, and the pricing of unhedgeable derivatives positions.

Fry, Maxwell J.

PD May 1996. **TI** How Foreign Direct Investment Improves the Current Account in Pacific Basin Economies. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/21; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 18. **PR** 2 pounds; no charge to students. **JE** E22, F23, F32, O11. **KW** Current Account. Foreign Investment. Pacific Basin.

AB This paper examines the effects of foreign direct investment (FDI) inflows to a group of six Pacific Basin economies. The paper starts by estimating the contemporaneous and lagged effects of FDI in the Pacific Basin on capital formation, national saving, imports, exports, and economic growth in a five-equation macroeconomic model. Dynamic simulations indicate that, despite that fact that FDI increases domestic investment, the positive direct and indirect (through accelerated growth) effects of FDI on national saving actually leads to an improvement in the current account in the long run. Outside the Pacific Basin, FDI has not increased aggregate domestic investment or economic growth. Hence, the paper concludes with some policy implications from the differential impacts of FDI in these two country groups.

PD June 1996. **TI** Financing Economic Reform: Mobilizing Domestic Resources and Attracting the Right Kind of External Resources. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/20; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 27. **PR** 2 pounds; no charge to students. **JE** E62, H62, O16. **KW** Economic Reform. Government Deficits. Emerging Markets. Financial Distortions.

AB Many newly emerging market economies need to increase resources available for investment. The first section of this paper shows that government deficits reduce national saving and growth. Furthermore, greater reliance on inflationary finance, financial repression and excessive foreign borrowing as ways of financing any given deficit reduces saving and impedes economic development even more. Although government deficits are generally not conducive to saving or long-run economic growth under any circumstances, financing them through voluntary private sector purchases of government debt appears to reduce the damaging effects of any given deficit. I then show that financial distortions fostered by government policies have exerted large, albeit indirect, effects on saving in developing countries. The policy conclusions are: (a) reduce the government deficit; (b) if deficit reduction is infeasible, finance it through the sale of government debt in voluntary domestic markets; (c) remove financial distortions; (d) improve the investment climate and facilitate foreign direct investment that then seeks to participate in the economy's growth.

PD June 1996. **TI** Emancipating the Banking System and Developing Markets for Government Debt. **AA** University of

Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/22; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 20. **PR** 2 pounds; no charge to students. **JE** G15, H63, O16. **KW** Government Debt. Developing Countries.

AB This paper concludes that, for any given government deficit, greater recourse to inflationary finance, financial repression and excessive government borrowing from abroad are associated with higher inflation, lower saving ratios and lower growth rates. The typical OECD country finances about 50 percent of its deficit from voluntary domestic sources, while the typical developing country finances only about 8 percent of its deficit from this source. In general, developing countries make too little use of voluntary private sector lenders. Hence, the final section of this paper concentrates on some of the practical issues involved in developing voluntary domestic markets for government debt.

PD June 1996. **TI** Saving, Growth, and Financial Distortions in Pacific Asia and Other Developing Areas. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/23; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 24. **PR** 2 pounds; no charge to students. **JE** E21, E22, O53. **KW** Saving. Financial Distortions. Investment. Pacific Basin.

AB This paper estimates a simultaneous-equation model in which the real deposit rate of interest and the black market exchange rate premium affect saving, investment, export growth, and output growth. The estimates corroborate earlier findings that direct effects of financial distortions on saving are minuscule. However, they indicate that financial distortions reduce investment and export growth. In turn, lower investment and export growth reduce output growth rates. Output growth is also reduced directly by financial distortions, possibly through an impact on investment efficiency. Because a major determinant of saving is the output growth rate, this paper concludes that saving is influenced substantially, albeit indirectly, by financial distortions through their effects on investment, export growth, and output growth. Simulations indicate that differences in the average values of the financial distortions variables explain approximately 50 percent of the difference in saving ratios and 75 percent of the difference in output growth rates between five Pacific Basin countries and 11 countries in other developing areas.

PD June 1996. **TI** In Favour of Financial Liberalisation. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/24; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 14. **PR** 2 pounds; no charge to students. **JE** E62, H62. **KW** Financial Liberalization. Financial Repression. Fiscal Reform.

AB Many developing country governments find it virtually impossible to satisfy their inter-temporal budget constraint with conventional tax revenue. Hence, they rely on revenue from the inflation tax and they reduce their interest costs through financial repression. Both the theory and evidence reported in this paper indicate that financial repression reduces growth. Here I also present a new estimate of the impact of real interest rates from 85 developing countries on their growth rates showing that both very low and pathologically high rates reduce growth. I then present a simultaneous-equation model with which I estimate both direct and indirect effects of financial distortions in real interest and black-market exchange rates on saving, investment, export growth and output growth. These distortions explain approximately 50 percent of the difference in saving ratios and 75 percent of the difference in output growth rates between five Pacific Basin countries and 11 control countries. The evidence reported here suggests that conducive financial conditions fostered by government policies played an important role in producing the virtuous circles of high saving, investment, output growth and export growth found in the Pacific Basin.

PD October 1996. **TI** Governance by Market: How Voluntary Domestic Markets for Government Debt Emerge in Pacific Asia and Other Developing Countries. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/26; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 38. **PR** 2 pounds; no charge to students. **JE** H63. **KW** Government Debt. Voluntary Markets.

AB A move towards developing voluntary domestic markets for government debt appears to offer benefits in terms of lower inflation and higher saving and growth. High growth, in turn, alleviates the deficit. There is, therefore, some hint of a virtuous circle in which greater use of voluntary domestic markets lowers inflation and raises growth, both of which reduce the government's deficit. In general, developing countries make too little use of voluntary private sector lenders. Hence, this paper focuses on some of the practical issues involved in developing voluntary domestic markets for government debt. Developing a voluntary market for government debt involves a fundamental change in the approach to financing the government deficit. In order to obtain a better understanding of this dramatic and possibly traumatic change to voluntary market financing, the Bank of England asked eight central banks to answer some questions about the process of change; all eight central banks responded. Much of the material presented here is based on these questionnaire responses.

PD October 1996. **TI** Governance at the Macro Level: Assessing Central Bank Independence in Pacific Asia and Other Developing Areas. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/27; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 16. **PR** 2 pounds; no charge to students. **JE** E58, E62. **KW** Central Banks. Bank Independence. Developing Countries. Financial Repression.

AB In this paper, I test a fiscal dominance hypothesis of central bank independence in developing countries. This fiscal dominance hypothesis holds that central bank independence is determined by both the magnitude of the government's deficit and the methods by which it is financed. My measure of central bank independence is the central bank's reaction to increased credit demands by the central government. The estimated monetary policy reaction functions show that larger deficits and greater reliance by governments on the inflation tax and financial repression are associated with less central bank independence. Considerable central bank independence is detected in the high-growth economies of Pacific Asia.

PD December 1996. **TI** Seigniorage in China. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper:

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97/01; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 22. **PR** 2 pounds; no charge to students. **JE** E51, E58. **KW** Seigniorage. China. Financial Repression.

AB The main problem that this paper addresses is the People's Bank of China and China's state-owned banks have undertaken and continue to undertake large quasi fiscal activities. Transfers from the Chinese banking system in the form of interest subsidies and loan default averaged over 5 percent of GDP over the period 1992-1994. If these transfers continue and, at the same time, depositors were not taxed implicitly through financial repression, the entire cost would have to be met from seigniorage revenue. My model of seigniorage from currency issue in China suggests that inflation would rise to over 40 percent, were currency issue the only source of such financing. The solution proposed here is to combine the proposed interest rate liberalization program with the imposition of a noninterest-earning reserve requirement solely against sight deposits. The model presented in this paper indicates that such an integrated demand for M2 and therefore will not affect the ability of the banking system as a whole to extend the same real volume of loans as it does under present arrangements.

Fu, Haishan

TI Refining Estimates of Marital Status Differences in Mortality at Older Ages. **AU** Korenman, Sanders; Goldman, Noreen; Fu, Haishan.

Garber, Alan M.

TI Cause-Specific Mortality Among Medicare Enrollees. **AU** Bhattacharya, Jay; Garber, Alan M.; MaCurdy, Thomas.

Garcia-Serrano, Carlos

TI Job Tenure: Does History Matter? **AU** Booth, Alison L.; Francesconi, Marco; Garcia-Serrano, Carlos.

Garvey, Gerald T.

PD August 1996. **TI** A Model of Myopic Corporate Behaviour with Efficient Stock Markets and Optimal Management Incentive Contracts. **AU** Garvey, Gerald T.; Grant, Simon; King, Stephen P. **AA** Garvey: University of Sydney. Grant and King: Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 307; Department of Economics, The Faculties, Australian National University, Canberra ACT 0200, Australia. **PG** 15. **PR** no charge. **JE** G30, L21, M10. **KW** Management Myopia. Incentive Design.

AB Existing models of corporate "short-termism" rely on an exogenously imposed, suboptimal management objective function. This paper endogenizes both managers' concern for short-term stock prices and the resulting distortions. We consider a standard agency problem between corporate managers and investors in which the short-term share price is determined before the manager has made her effort choice and therefore cannot be informative in the standard principal-agent sense. We show that when the manager can be prevented from trading on her own account on the stock market, the manager is fully insured against short-term share price movements and actually exhibits a long-term bias. We then allow the manager to trade in a way that is observable to market participants but which is not verifiable in court. In this case, the optimal incentive contract (i) provides far weaker effort incentives than do contracts in the absence of trade, and (ii) induces a bias towards short-term returns. The bias is greater when returns are more variable and the manager is more risk-averse.

Geanakoplos, John

PD July 1996. **TI** Three Brief Proofs of Arrow's Impossibility Theorem. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1123R; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 6. **PR** no charge. **JE** D11, D71. **KW** Arrow's Theorem. Arrow's Axioms. Proofs.

AB The first proof of Arrow's Theorem is given informally, with almost no notation. The second proof is formal and almost as brief, and it clarifies the logic lying behind the first proof. It shows that Arrow's axioms immediately imply neutrality, that is that every social decision must be made by exactly the same process. Neutrality immediately implies some agent is symmetrically doubly pivotal, and a symmetrically doubly pivotal agent is trivially a dictator. The third proof shows that any doubly pivotal agent must be a dictator, and it used the Condorcet paradox to show the existence of a doubly pivotal agent. The simplicity of all the proofs comes from replacing Arrow's decisive voter and Barbera's pivotal voter with a doubly pivotal voter.

PD July 1996. **TI** The Hangman's Paradox and Newcomb's Paradox As Psychological Games. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1128; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 19. **PR** no charge. **JE** C72, D81. **KW** Game. Psychological Game. Paradox.

AB We present a (hopefully) fresh interpretation of the Hangman's Paradox and Newcomb's Paradox by casting the puzzles in the language of modern game theory, instead of in the realm of epistemology. Game theory moves the analysis away from the formal logic of the puzzles toward practical problems, such as: On what day would the executioner hang the prisoner if he wanted to surprise him as much as possible? How should a surprise test be administered? We argue that both the Hangman's Paradox and Newcomb's Paradox are analogous to a well-known phenomenon in game theory, that giving a player an additional attractive (even dominant) strategy may make him worse off. In the Hangman's Paradox, the executioner is determined to surprise the prisoner as much as possible, yet he cannot surprise him at all because he cannot commit in advance to a random schedule. The possibility of change his mind (i.e., the presence of alternative strategies) superficially would seem to help the executioner, but because it changes the expectations of the prisoner, in the end it works dramatically to his advantage. In Newcomb's Paradox a man given an extra dominant choice is worse off because it changes God's expectations about what he will do.

PD September 1996. **TI** Nash and Walras Equilibrium Via Brouwer. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1131; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 18. **PR** no charge. **JE** C62. **KW** Nash. Walrus. Brouwer. Kakutani. Maximum Principle.

AB The existence of Nash and Walras equilibrium is proved via Brouwer's Fixed Point Theorem, without recourse to Kakutani's Fixed Point Theorem for correspondences. The domain of the Walras fixed point map is confined to the price simplex, even when there is production and weakly quasi-concave preferences. The key idea is to replace optimization with "satisficing improvement," i.e., to replace the Maximum Principle with the "Satisficing Principle.".

PD September 1996. **TI** Promises Promises. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1143; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 32. **PR** no charge. **JE** D50, D80, G33. **KW** Promises. General Equilibrium. Collateral.

AB In the classical general equilibrium model, agents keep all their promises, every good is traded, and competition prevents any agent from earning superior returns on investments in financial markets. In this paper I introduce the age-old problem of broken promises into the general equilibrium model, and I find that a new market dynamic emerges. Given the legal system and institutions, market forces of supply and demand will establish the collateral levels which are required to secure promises. Since physical collateral will typically be scarce, these collateral levels will be set so low that there is bound to be some default. Many kinds of promises will not be traded, because that also economizes on collateral. Scarce collateral thus creates a mechanism for determining endogenously which assets will be traded, thereby helping to resolve a long standing puzzle in general equilibrium theory. Finally, I shall show that under suitable conditions, in rational expectations equilibrium, some investors will be able to earn higher than normal returns on their investments. The legal system, in conjunction with the market, will be under constant pressure to expand the potential sources of collateral. This will lead to market innovation.

Geil, Peter

TI Economic Incentives and Hospitalization in Germany. **AU** Zimmermann, Klaus F.; Geil, Peter; Million, Andreas; Rotte, Ralph.

Genesove, David

PD January 1997. **TI** The Sugar Institute Learns to Organize Information Exchange. **AU** Genesove, David; Mullin, Wallace. **AA** Genesove: Massachusetts Institute of Technology and National Bureau of Economics Research. Mullin: Michigan State University and National Bureau of Economics Research. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 97/03; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 29. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** L13. **KW** Information Exchange. Oligopoly. Sugar. Trade Association. Collusion.

AB This paper describes information exchange under the Sugar Institute, the trade association of U.S. Domestic sugar cane refiners, between 1928 and 1936. The Institute collected production and delivery data from the individual firms and returned it to them in aggregated form. Attempts to exchange sales data were stymied by the larger firms. Surprisingly, there is no indication of misreporting of statistics by Institute members, although statistics were, at times, withheld. The paper concentrates on the evolution of the Institute. Proposals for successor organizations show that a workable mechanism required greater discretion to the central authority and greater voting right to the larger firms.

Geronimus, Arline T.

PD December 1995. **TI** On the Validity of Using Census Geocode Characteristics to Proxy Individual Socioeconomic Characteristics. **AU** Geronimus, Arline T.; Bound, John; Neidert, Lisa J. **AA** Geronimus and Neidert: University of Michigan. Bound: University of Michigan and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 189; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C43, C52. **KW** Census Geocodes. Aggregate Proxies. Socioeconomic Characteristics.

AB Investigators of social differentials in health outcomes commonly augment incomplete micro data by appending socioeconomic characteristics of residential areas (such as median income in zip code) to proxy for individual characteristics. However, little empirical attention has been paid to how well this aggregate information serves as a proxy for the individual characteristics of interest. We build on recent work addressing the biases inherent in proxies and consider two health- related examples within a statistical framework that illuminate the nature and sources of biases. Data from the Panel Study of Income Dynamics and the National Maternal and Infant Health Survey are linked to census data. We assess the validity of using the aggregate census information as a proxy for individual information when estimating main effects, and when controlling for potential confounding between socioeconomic and sociodemographic factors in measures of general health status and infant mortality. We find a general, but not universal, tendency for aggregate proxies to exaggerate the effects of micro-level variables and to do more poorly than micro-level variables at controlling for confounding.

Ghironi, Fabio

PD January 1997. **TI** Out in the Sunshine? Outsiders, Insiders, and the United States in 1998. **AU** Ghironi, Fabio; Giavazzi, Francesco. **AA** Ghironi: University of California, Berkeley. Giavazzi: Universita Bocconi. **SR** Centre for Economic Policy Research Discussion Paper: 1547; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 42. **PR** 4 pounds or $8.00. **JE** F31, F33, F41, F42. **KW** International Policy. European Monetary Union.

AB The paper analyses monetary and fiscal policy interactions in a three-country world, interpreted to represent two EU economies and the rest of the world. The analysis extends well-known results in the literature on international policy spillovers by investigating the effects of different sizes of the two EU economies. A set of general results is derived, which allows a reinterpretation of earlier findings in the literature on policy-making in interdependent economies.

Ghosal, S.

PD September 1996. **TI** Exchange and Optimality. **AU** Ghosal, S.; Polemarchakis, H. M. **AA** Ghosal: University of London. Polemarchakis: Universite Catholique de Louvain. **SR** Yale Cowles Foundation Discussion Paper: 1133; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 17. **PR** no charge. **JE** C72, D62. **KW** Social States. Optimality. Exchange.

AB A feasible social state is irreducible if and only if, for any non- trivial partition of individuals with two groups, there exists another feasible social state at which every individual in the first group is equally well-off and someone strictly better-off. Competitive equilibria decentralize irreducible pareto optimal social states.

Giavazzi, Francesco

TI High Yields: The Spread on German Interest Rates. **AU** Favero, Carlo; Giavazzi, Francesco; Spaventa, Luigi.

TI Out in the Sunshine? Outsiders, Insiders, and the United States in 1998. **AU** Ghironi, Fabio; Giavazzi, Francesco.

Gibbons, Robert

PD August 1996. **TI** An Introduction to Applicable Game Theory. **AA** Cornell University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 199; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C70. **KW** Game Theory. Applied Economics. Bargaining Theory.

AB This paper offers an introduction to game theory for applied economists. I try to give simple definitions and intuitive examples of the basic kinds of games and their solution concepts. There are four kinds of games: static or dynamic, and complete or incomplete information. ("Complete information" means there is no private information.) The corresponding solution concepts are: Nash equilibrium in static games of complete information; backwards induction (or subgame-perfect Nash equilibrium) in dynamic games of incomplete information; Bayesian Nash equilibrium in static games with incomplete information; and perfect Bayesian (or sequential) equilibrium in dynamic games with incomplete information. The main theme of the paper is that these solution concepts are closely linked. As we consider progressively richer games, we progressively strengthen the solution concept, to rule out implausible equilibria in the richer games that would survive if we applied solution concepts available for simpler games. In each case, the stronger solution concept differs from the weaker concept only for the richer games, not for the simpler games.

Gilbert, Christopher L.

PD January 1997. **TI** Manipulation of Metals Futures: Lessons From Sumitomo. **AA** Queen Mary and Westfield College. **SR** Centre for Economic Policy Research Discussion Paper: 1537; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 26. **PR** 4 pounds or $8.00. **JE** G13, G18, K22. **KW** Copper Prices. Futures. Manipulation. Squeezes.

AB The Sumitomo Corporation manipulated the London Metal Exchange (LME) copper price, which forms the pricing basis for the world copper market, from at least 1991 until earlier this year. This manipulation has concentrated attention on the functioning and governance of London futures markets, and in particular of the LME. This paper argues that futures market manipulation is not illegal under UK financial services regulation, but that in any case, deterrence is better than prosecution. Manipulation will be best deterred by greater transparency, in particular through mandatory reporting of client positions to exchanges, but also through the publication of suitably aggregated positions data. While there is no evidence that the LME has been insufficiently active in attempting to eliminate manipulations, price discovery on futures markets generates an externality that justifies the regulator seeking even higher standards in the future.

Glaeser, Edward L.

PD January 1996. **TI** Why is There More Crime in Cities? **AU** Glaeser, Edward L.; Sacerdote, Bruce. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5430; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 40. **PR** $5.00. **JE** K42, D81, D12. **KW** Punishment. Crime. Deterrence. Urban Areas.

AB Crime rates are much higher in big cities than in either small cities or rural areas, and this situation has been relatively pervasive for several countries. This paper attempts to explain this connection by using victimization data, evidence from the NLSY on criminal behavior and the Uniform Crime Reports. Higher pecuniary benefits for crime in large cities can explain approximately 27 percent of the effect for overall crime, though obviously much less of the urban-crime connection for non-pecuniary crimes such as rape or assault. Lower arrest probabilities, and lower probability of recognition, are a feature of urban life, but these factors seems to explain at most 20 percent of the urban crime effects. The remaining 45-60 percent of the effect can be related to observable characteristics of individuals and cities. The characteristics that seem most important are those that reflect tastes, social influences and family structure.

PD January 1996. **TI** The Social Costs of Rent Control Revisited. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5441; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 32. **PR** $5.00. **JE** R21, D11, D61. **KW** Rent Control. Rationing. Price Theory.

AB The textbook graphical analysis of price control is inappropriate any time there is substantial consumer heterogeneity. In cases such as rental apartments, where one unit is usually the maximum bought per customer, and the downward slope of the demand function comes exclusively from consumer heterogeneity, this analysis misses a primary source of welfare loss. A major social cost of rent control is that without a fully operational price mechanism the "wrong" consumers end up using apartments. Unless apartments are somehow allocated perfectly across consumers, rental units will be allocated to consumers who gain little utility from renting and rental units will not go to individuals who desire them greatly. Thus for a sufficiently marginal implementation of rent control, these costs will always be more important than the undersupply of housing.

TI The L.A. Riot and the Economics of Urban Unrest. **AU** DiPasquale, Denise; Glaeser, Edward L.

Goldman, Noreen

TI Refining Estimates of Marital Status Differences in Mortality at Older Ages. **AU** Korenman, Sanders; Goldman, Noreen; Fu, Haishan.

Gollin, Douglas

PD December 1995. **TI** Do Taxes on Large Firms Impede Growth?: Evidence from Ghana. **AA** University of Minnesota. **SR** University of Minnesota Economic Development Center Bulletin: 95/09; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455.

PG 49. **PR** no charge. **JE** E62, H25, O11, O17. **KW** Taxes. Ghana. Small Enterprises. Self-Employment. Firm Size.
AB Many developing countries pursue policies that treat large and small firms differently. For example, large firms may be subject to a value added tax while small firms are explicitly exempted. Moreover, governments often find it impractical to collect taxes from the smallest enterprises; this may increase the tax burden for larger firms, whose compliance can be enforced. Such policies clearly affect the size distribution of firms. But how great is the impact on macro variables? How large are the resulting inefficiencies? And what are the dynamic general equilibrium variant of the Lucas (1978) span-of-control model to address such questions. The model is matched to data from the Ghanaian manufacturing sector. As a policy experiment, alternative tax and regulatory regimes are compared. The model shows that a policy disproportionately penalizing large firms can reduce output by nearly one-half, compared with an alternative policy regime in which all firms face the same taxes and regulatory costs.

Goodhart, Charles

PD April 1995. **TI** One Day in June, 1993: A Study of the Working of Reuters 2000-2 Electronic Foreign Exchange Trading System. **AU** Goodhart, Charles; Ito, Takatoshi; Payne, Richard. **AA** Goodhart and Payne: London School of Economics. Ito: International Monetary Fund and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 179; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** F31, F41, G15. **KW** Trading Systems. Bid-Ask Spread. Reuters. Foreign Exchange. Broking System.
AB The paper utilized foreign exchange data (bid, ask and transaction prices and quantities) collected from the screen of the electronic broking system (Reuter D2000-2) on June 16, 1993. The bid and ask quotes, which are "firm" in this data set, are compared with the Reuters FXFX page, which reports only indicative bid and ask prices. A caution is necessary due to its small samples (7 hours). The paper finds that although the bid-ask mean of indicative quotes is similar to that of "firm" quotes, the behavior of bid-ask spread and the frequency of quote entry are quite different in the two kinds of quotes. The bid-ask spreads in the broking system are much more time-variant and dependent on the frequency of trade, while the indicative bid-ask spreads tend to cluster at round numbers.

PD July 1996. **TI** The Rise of China as an Economic Power. **AU** Goodhart, Charles; Xu, C. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 299; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 64. **PR** no charge. **JE** A10, O10, P50. **KW** China. Economic Power. Growth.
AB In the twenty years since the Cultural Revolution, China has maintained fast real growth. This occurred despite China having similar problems to other transitional economies, eg. loss-making State Owned Enterprises (SOE's), eroding fiscal revenues and inflation, (Section 3). Although China initially adopted the Soviet central planning model, after the 1950's break Chinese planning changed towards a regionally- based system with local planning (Section 2). In contrast to the centrally-based, functionally-specialized (U form or unitary structure) Soviet model, the Chinese economy is organized on a multi-layer-multi- regional (M form) basis. This encouraged development of small size township and village enterprises (TVE's), the main engine of Chinese growth. Power and control remained with the Party and the State, but was diffused much more widely, regionally and locally. This allowed initiatives at lower (political) levels to establish institutions, both in agriculture (the "household responsibility system") and industry (TVE's), without state protection. Even among regionally controlled SOE's, "tournament rivalry" between regions, etc., and between SOE's, and TVE's provided competition.

Goodhue, Rachael

TI Implications of GATT for Eastern Europe and the Baltics.
AU Michalska, Grazyna; Goodhue, Rachael; Small, Arthur.

Gopinath, Munisamy

PD October 1996. **TI** R&D Spillovers: Evidence from U.S. Food Processing, Farm Machinery and Agriculture. **AU** Gopinath, Munisamy; Roe, Terry L. **AA** Gopinath: United States Department of Agriculture. Roe: University of Minnesota. **SR** University of Minnesota Economic Development Center Bulletin: 96/02; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 18. **PR** no charge. **JE** O13, O32, Q16. **KW** Reasearch and Development Spillovers. Food Processing. Agriculture. Farm Machinery.
AB This paper focuses on the private and social rates of return to R&D capital in the three vertically linked sectors, primary agriculture, food processing, and farm machinery and equipment. Evidence supporting a divergence between these rates is found for primary agriculture and food processing. Using a cost function approach, the private rates of return to R&D capital ranged from an average of 10.2 percent per annum for food processing to 22.3 percent for farm machinery and equipment. In the case of agriculture, the direct return to public R&D averaged 37.3 percent per annum. The social rates of return to R&D capital in agriculture and food processing are significantly larger than the private rates due to the existence of spillovers. While the divergence between rates is small in the farm machinery and equipment sector, its high direct rate may suggest relatively large intra-sector spillovers. We find that spillovers from public agricultural R&D to food processing exceeds the spillovers from food processing to the other two sectors. Thus, to a degree, public R&D in agriculture mitigates the market's failure in food processing to fully appropriate the returns to their R&D capital.

Gorton, Gary

PD February 1996. **TI** Universal Banking and the Performance of German Firms. **AU** Gorton, Gary; Schmid, Frank A. **AA** University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5453; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** $5.00. **JE** G21, G32, D82. **KW** Germany. Universal Banking. Ownership. Control.
AB Universal banking is an alternative mechanism to a stock market for risk-sharing, for providing information for guiding investment, and for contesting corporate governance. In Germany, where the stock market has historically been small,

banks hold equity stakes in firms and have proxy voting rights over other agents' shares. In addition, banks lend to firms and have representatives on corporate boards. If a banking relationship is a substitute for the stock market, then interaction with a bank should improve the performance of firms. But, if banks have private information about firms that they lend to and have monopolistic control over access to external capital markets, then bank interests may conflict with those of other equity holders, especially those whose shares are voted by the banks in proxy. The authors empirically investigate the influence of banks on the performance of German firms taking account of banks' equity holdings, the extent of banks' proxy voting rights, and the ownership structure of the firms' equity. The authors test for conflicts-of-interest in bank behavior and ask whether the relationship between banks and firms has changed between the 1970's and 1980's.

Gotz, Muriel

PD March 1996. **TI** Monitoring Reports With a Self-Interested Inspector. **AU** Gotz, Muriel; Summer, Martin. **AA** Gotz: University of Vienna. Summer: University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/11; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 18. **PR** 2 pounds; no charge to students. **JE** C44, C72, D82, K42. **KW** Monitoring. Information. Inspection Games. Moral Hazard.

AB Many economic decisions are based on reports about privately held information that influences transactions between the parties. A common way how organizations deal with the resulting incentive problems is to hire an inspector to investigate reports. An inspector does not necessarily share the goals of the organization. If an inspector is work averse and his effort spent on investigating reports is not observable this creates a moral hazard problem whenever there is an imperfect monitoring technology. This problem arises because this organization can not distinguish between an inspection that does not find evidence of misrepresented information and an inspection that just has not been conducted with due care. We show under what circumstances an organization can overcome this moral hazard problem and when the inspector fulfills his function of deterring falsification of reports.

Gozalo, Pedro

TI Conditional Independence Restrictions: Testing and Estimation. **AU** Linton, Oliver B.; Gozalo, Pedro.

Grant, Simon

TI A Model of Myopic Corporate Behaviour with Efficient Stock Markets and Optimal Management Incentive Contracts. **AU** Garvey, Gerald T.; Grant, Simon; King, Stephen P.

Gray, Brian

TI The Evolving Structure of the Australian Financial System. **AU** Edey, Malcolm; Gray, Brian.

Gray, Stephen F.

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

Green, Francis

PD November 1996. **TI** Skill, Training, Organizational Commitment and Unemployment: The Economics of a Labor Management Strategy. **AA** University of Leeds and London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 313; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 26. **PR** no charge. **JE** J31, M12. **KW** Human Resources. Efficiency Wages. Labor Management.

AB This paper argues that training often has a wider role than just the acquisition of technical skills and that a company ought to be analyzed as part of a broader labor management strategy for companies. Evidence is adduced for this, drawing on both economics and management literatures, and in particular on analyses of organizational commitment. A micro model of human capital acquisition in the firm is examined, and it is shown that different human resource policies are mutually reinforcing. A macro model of efficiency wages is also developed, but one that is modified by the presence of a labor management strategy. It is shown that the strategy tends to reduce both unemployment and wages, and to have ambiguous effects on welfare. It is suggested that variations in organizational commitment and associated labor management strategies, can account for some basic stylized facts about the distribution of unemployment.

Gregg, P.

PD September 1996. **TI** It Takes Two: Employment Polarisation in the OECD. **AU** Gregg, P.; Wadsworth, Jonathan. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 304; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 10. **PR** no charge. **JE** E24, I32. **KW** Worklessness. Workless Households. Employment.

AB Unemployment is a well established measure of individuals' desire for work but measures of poverty and most benefit systems focus on the household. This paper documents worklessness at a household level for 13 OECD countries over the last ten years. Variations in family size and the distribution of the available work across families leads to variation in workless households which are far more uniform across countries than unemployment or employment rates. For instance in 1994 Luxembourg had the lowest workless household rate at 10.5 percent and Ireland the highest at 22.3 percent. The paper goes on to explore the variation across family type and over time for the OECD countries and evaluates how powerful employment growth is in tackling worklessness across households.

Grey, Matthew

PD November 1996. **TI** A Model of Employment and Real Wages Under Imperfect Competition. **AU** Grey, Matthew; Madsen, Jakob B. **AA** Grey: Australian National University. Madsen: University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9650; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 14. **PR** no charge. **JE** E24. **KW** Labor Demand. Imperfect Competition. Wage Elasticities.

AB This paper establishes in an interrelated demand model for hours and employment allowing for adjustment costs under imperfect competition. The model implies that an increase in straight-time wages may increase employment, because firms substitute from hours to employment and lower their markups. Using sectoral data for Australian manufacturing, our empirical estimates indicate that employment is hardly affected by real wages.

Griliches, Zvi

PD January 1996. **TI** Education, Human Capital, and Growth: A Personal Perspective. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5426; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** $5.00. **JE** J24, I21, J45. **KW** Education. Human Capital. Growth. Trust.

AB This paper reviews the literature on the relationship of economic growth to the education levels of the labor force. The emphasis is on Ben-Porath's contribution to some of the issues in this field: the endogeneity of schooling, the role of the public sector as an "absorber" of educated labor, and the importance of personal human capital created by investments in reputation and personal relationships, the F- connection.

TI Measuring Science: An Exploration. **AU** Adams, James; Griliches, Zvi.

TI Characteristics of Demand for Pharmaceutical Products: An Examination of Four Cephalosporins. **AU** Ellison, Sara Fisher; Cockburn, Iain; Griliches, Zvi; Hausman, Jerry.

Grossman, Gene M.

PD January 1996. **TI** Intergenerational Redistribution With Short-Lived Governments. **AU** Grossman, Gene M.; Helpman, Elhanan. **AA** Grossman: Princeton University and National Bureau of Economic Research. Helpman: Tel Aviv University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5447; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 35. **PR** $5.00. **JE** D31, D72, H23, H55. **KW** Political Economy. Public Choice. Intergenerational Redistribution.

AB The authors study the politics of intergenerational redistribution in an overlapping generations model with short-lived governments. The successive governments -- who care about the welfare of the currently living generations and possibly about campaign contributions -- are unable to precommit the future course of redistributive taxation. In a stationary politico-economic equilibrium, the tax rate in each period depends on the current value of the state variable and all expectations about future political outcomes are fulfilled. The authors find that there exist multiple stationary equilibria in many political settings. Steady-state welfare is often lower than it would be in the absence of redistributive politics.

PD January 1996. **TI** Intergenerational Redistribution with Short-Lived Governments. **AU** Grossman, Gene M.; Helpman, Elhanan. **AA** Grossman: Princeton University. Helpman: Tel Aviv University and CIAR. **SR** Princeton Woodrow Wilson School, Discussion Paper in Economics: 178; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. **PG** 35. **PR** no charge. **JE** D72, E62, H23. **KW** Transfers. Political Economy. Income Redistribution. Overlapping Generations.

AB This paper studies the politics of intergenerational redistribution in an overlapping generations model with short-lived governments. The successive governments -- who care about the welfare of the currently living generations and possibly about campaign contributions -- are unable to precommit the future course of redistributive taxation. In a stationary politico-economic equilibrium, the tax rate in each period depends on the current value of the state variable and all expectations about future political outcomes are fulfilled. Steady-state welfare is often lower than it would be in the absence of redistributive politics.

TI Common Agency and Coordination: General Theory and Application to Tax Policy. **AU** Dixit, Avinash; Grossman, Gene M.; Helpman, Elhanan.

PD June 1996. **TI** Electoral Competition with Policy Compromise. **AU** Grossman, Gene M.; Helpman, Elhanan. **AA** Grossman: Princeton University. Helpman: Tel Aviv University and CIAR. **SR** Princeton Woodrow Wilson School, Discussion Paper in Economics: 181; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. **PG** 40. **PR** no charge. **JE** D72, D78. **KW** Political Economy. Campaign Contributions. Lobbying. Voting. Elections.

AB We study the electoral competition between two parties vying for seats in a legislature. The electorate includes knowledgeable voters and impressionable voters, the latter susceptible to electioneering activities. A special interest group provides campaign financing in exchange for influence over the platforms. The parties take positions on two issues, one on which their divergent platforms are fixed and another pliable issue where their announcements are used to woo dollars and votes. The interest group contributes with the knowledge that the final policies will be a compromise between the positions of the two parties. We examine two modes of voting behavior. When knowledgeable voters vote sincerely, the parties' positions on the pliable issue diverge, and the more popular party caters more to the special interest group. When knowledgeable voters vote strategically, the interest group often induces the parties to announce identical pliable platforms. We investigate the determinants of the platforms, contributions, vote counts, and policy compromise, and consider how changes in legislative institutions might affect these outcomes.

PD September 1996. **TI** Competing for Endorsements. **AU** Grossman, Gene M.; Helpman, Elhanan. **AA** Grossman: Princeton University. Helpman: Tel Aviv University and CIAR. **SR** Princeton Woodrow Wilson School, Discussion Paper in Economics: 182; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. **PG** 43. **PR** no charge. **JE** D72. **KW** Political Economy. Elections. Voting. Special Interests.

AB Endorsements are a simple language for communication between well informed interest-group leaders and lesser informed group members. The members, who share some policy concerns, may not fully understand where their interests lie on certain issues. If their leaders cannot fully explain the issues, they can convey some information by endorsing one political party or the other. Members must interpret the import of the endorsement in view of their feelings about the parties on other unrelated matters. When interest groups endorse legislative contenders, the latter may compete for their backing. Policy outcomes may favor special interests at the expense of the general public. We examine the conditions under which parties compete for endorsements, the extent to which policy outcomes are skewed, and the efficiency properties of the resulting political equilibria. We consider both leaders who follow a mechanical endorsement rule and leaders who behave strategically.

PD December 1996. **TI** Competing for Endorsements. **AU** Grossman, Gene M.; Helpman, Elhanan. **AA** Grossman: Princeton University. Helpman: Tel Aviv University. **SR** Centre for Economic Policy Research Discussion Paper: 1546; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 32. **PR** 4 pounds or $8.00. **JE** D72. **KW** Political Economy. Elections. Voting. Special Interest Groups.

AB See abstract for Grossman, Gene M. and Elhana Helpman, September 1996. "Competing for Endorsements". Princeton Woodrow Wilson School, Discussion Paper in Economics: 182; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013.

Haltiwanger, John

TI Employer Size and the Wage Structure in U.S. Manufacturing. **AU** Davis, Steven J.; Haltiwanger, John.

Hamlin, Alan

TI Two Theories of Rational Voting. **AU** Brennan, Geoffrey; Hamlin, Alan.

Hammour, Mohamad L.

TI The "Fundamental Transformation" in Macroeconomics. **AU** Caballero, Ricardo J.; Hammour, Mohamad L.

TI The Macroeconomics of Specificity. **AU** Caballero, Ricardo J.; Hammour, Mohamad L.

Hanemann, Michael

TI Temporal Reliability of Estimates from Contingent Valuation. **AU** Carson, Richard; Hanemann, Michael; Kopp, Raymond; Krosnick, Jon; Mitchell, Robert; Presser, Stanley; Ruud, Paul; Smith, Kerry; Conaway, Michael; Martin, Kerry.

Hannah, Leslie

PD January 1997. **TI** Marshall's 'Trees' and the Global 'Forest': Were 'Giant Redwoods' Different? **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 318; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 47. **PR** no charge. **JE** G33, L11. **KW** Corporations. National Selection. Chandler. Firm Size.

AB This essay examines the fate of the 100 largest industrial firms in the world in 1912 over the period to 1995. Disappearance and decline were the most common outcomes, but a few outstanding performers -- firms like Burmah / BP and Procter & Gamble -- left descendants eight or nine times their initial size, in "real stock exchange price" terms. There were no significant differences between the performance of giant German, British and American firms, other than a slightly greater tendency to disappear among American firms. The convergence of national performance of giant firms is probably related to converging strategies and structures of such firms in advanced industrial countries. Long-run differences in national economic performance in the twentieth century, at least among industrial leaders, are rooted elsewhere: in non- industrial sectors of the economy or smaller industrial firms. The analysis of the long-run evolution of giant firms also suggests that, while firms in "old" industries on average performed worse than those in "new" ones, the 1912 population included equal numbers of each and there was, in any case, greater variability of outcomes within than between industries. No simple formula enables us to discriminate ex ante between long-run corporate success and failure.

Hanson, Gordon H.

PD December 1995. **TI** The Effects of Offshore Assembly on Industry Location: Evidence from U.S. Border Cities. **AA** University of Texas and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5400; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 18. **PR** $5.00. **JE** F13, F14, F23. **KW** Trade. Mexico. Nafta. Tariffs.

AB This paper examines how the growth of offshore assembly in Mexico has affected manufacturing activity in U.S. border cities. Under the offshore assembly provision of the U.S. tariff schedule, goods that are assembled abroad using U.S.-manufactured components receive preferential tariff treatment upon reentry into the United States. Foreign assembly plants in Mexico, most of which are owned by U.S.-based multinationals, are overwhelmingly concentrated along the border with the United States. This paper combines data on employment and earnings in two-digit manufacturing industries for U.S. border cities with data on employment and value added in foreign assembly plants in the corresponding Mexican border cities. The estimation results show strong support for the hypothesis that the growth of export assembly in Mexico increases the demand for manufacturing goods produced in U.S. border cities. Implications of the North American Free Trade Agreement for the U.S.- Mexico border region are discussed.

TI Globalization, Outsourcing, and Wage Inequality. **AU** Feenstra, Robert C.; Hanson, Gordon H.

PD January 1996. **TI** U.S.-Mexico Integration and Regional Economies: Evidence from Border- City Pairs. **AA** University of Texas and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5425; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 19. **PR** $5.00. **JE** F13, F14, F15, J61. **KW** Nafta. Mexico. Trade. Employment.

AB This paper examines whether U.S.-Mexico economic integration is causing economic activity in the United States to relocate to the U.S.- Mexico border region. The approach I take is to study U.S.-Mexico border-city pairs. Border cities are natural laboratories in which to study the effects of trade policy. To the extent transport costs are the main non-trade policy barriers to trade, the authors expect regional economic integration to cause economic activity in border cities to expand. The paper estimates demand links between Mexican and U.S. border cities using data on the six largest border-city pairs over the period 1975-1989. The results indicate that the growth of export manufacturing in Mexico can account for a substantial portion of employment growth, in general, and of manufacturing employment growth, in particular, in U.S. border cities over the sample period. This suggests that NAFTA will contribute to the formation of binational regional production centers along the U.S.-Mexico border.

Hanushek, Eric A.

PD December 1995. **TI** Schooling, Labor Force Quality, and Economic Growth. **AU** Hanushek, Eric A.; Kim, Dongwook. **AA** Hanushek: University of Rochester and National Bureau of Economic Research. Kim: University of Rochester. **SR** National Bureau of Economic Research Working Paper: 5399; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 34. **PR** $5.00. **JE** I21, O41, J24. **KW** Human Capital. Growth. Intelligence. IQ.

AB Human capital is almost always identified as a crucial ingredient for growing economies, but empirical investigations of cross-national growth have done little to clarify the dimensions of relevant human capital or any implications for policy. This paper concentrates on the importance of labor force quality, measured by cognitive skills in mathematics and science. By linking international test scores across countries, a direct measure of quality is developed. One standard deviation in measured cognitive skills translates into one percent difference in average annual real growth rates -- an effect much stronger than changes in average years of schooling, the more standard quantity measure of labor force skills. Further, the estimated growth effects of improved labor force quality are very robust to the precise specification of the regressions. The importance of quality implies a policy dilemma, because production function estimates indicate that simple resource approaches to improving cognitive skills appear generally ineffective.

Hassett, Kevin

TI Investment Under Alternative Return Assumptions: Comparing Random Walks and Mean Reversion. **AU** Metcalf, Gilbert E.; Hassett, Kevin.

Hatzius, J.

PD March 1997. **TI** Foreign Direct Investment, Capital Formation, and Labour Costs: Evidence From Britain and Germany. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 336; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 39. **PR** no charge. **JE** F21, J23, J30. **KW** Foreign Direct Investment. Labor Demand. Britain. Germany.

AB This paper argues that the liberalization of foreign direct investment (FDI) has made labor costs more important to domestic investment and long-run labor demand. It provides evidence from British and German data that is consistent with this view. First, high unit labor costs increase FDI outflows and lower FDI inflows. Second, the effect of unit labor costs on domestic manufacturing investment was more negative in the high-FDI 1980's than in the low-FDI 1970's, and this change was concentrated in high-FDI industries. The implied effect on long-run labor demand is substantial.

PD March 1997. **TI** Domestic Jobs and Foreign Wages: Labour Demand in Swedish Multinationals. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 337; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 19. **PR** no charge. **JE** F23, J23. **KW** Multinationals. Labor Demand. Sweden.

AB The labor demand decisions of multinational corporations (MNC's) are likely to depend not only on domestic, but also on foreign labor costs. This paper tests this hypothesis by estimating labor demand equations for a sample of Swedish MNC's. Indeed, higher foreign costs increase an MNC's Swedish employment and reduce its foreign employment. As MNC's become more important in many OECD countries, the role of foreign labor costs in the determination of aggregate domestic employment is likely to increase.

Hausman, Jerry

TI Characteristics of Demand for Pharmaceutical Products: An Examination of Four Cephalosporins. **AU** Ellison, Sara Fisher; Cockburn, Iain; Griliches, Zvi; Hausman, Jerry.

Hay, Donald

TI Inventory Behaviour: A Comparative Study of UK and Japanese Firms. **AU** Corbett, Jenny; Hay, Donald; Louri, Helen.

Heiman, Amir

PD December 1996. **TI** Learning, Forgetting, and the Diffusion Process of Food and Agricultural Products. **AU** Heiman, Amir; Zilberman, David. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 809; 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** 22. **PR** 25 cents per page domestic; 50 cents per page foreign. **JE** D11. **KW** Consumer Economics. Food Marketing. Mathematical Models.

AB The objectives of this paper are to: (1) empirically investigate the relationship between presence at the marketplace and purchasing behavior, and (2) develop a normative model of sampling which will take into account learning activity, absence from the marketplace, and sampling efforts of the seller.

PD December 1996. **TI** Modeling Money-Back Guarantees As Options. **AU** Heiman, Amir; Zilberman, David. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 810; 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** 25 cents per page domestic; 50 cents per page foreign. **JE** M31. **KW** Consumer Economics. Money-Back Guarantees. Marketing. Mathematical Models.

AB This paper builds a model to explain the relationship between the price of a product with money-back guarantees and the duration of the return period. Money-back guarantee arrangements are modeled as options and product prices are derived and shown to be a concave function of their duration.

The feasibility and optimality of different return options are proven, and the paper demonstrates that these options should not allow consumers to allow arbitrage profits by buying short term options from many retailers. However, different consumers may choose different options based upon their prior knowledge and experience. Some of the main results of the paper are demonstrated with anecdotal evidence for money-back guarantee arrangements for computer peripherals.

PD December 1996. **TI** The Economics of Demonstration. **AU** Heiman, Amir; Zilberman, David. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 811; 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** 27. **PR** 25 cents per page domestic; 50 cents per page foreign. **JE** D11, M31, M37. **KW** Consumer Economics. Economics of Demonstration. Advertising. Marketing Models.

AB This paper develops a model to analyze levels of demonstration and product prices in a competitive industry producing a durable. Consumers are modeled to have prior perceptions about the product and the demonstrations provide direct experience and opportunity for learning. Our results argue that firms demonstrate when their actual product quality is better than their perceived quality, and the demonstration level does not necessarily increase with product quality. Firms with high-end and low-end quality may offer minimal levels of demonstration. Our anecdotal case studies support our theoretical findings which show that the main reason a single firm offers demonstration is to launch a new product or because of unjustified quality perceptions. Competing firms do not always respond to demonstrations. For example, IBM did not respond to demonstrations offered by its rivals.

Helliwell, John F.

PD February 1996. **TI** Economic Growth and Social Capital in Asia. **AA** University of British Columbia and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5470; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 17. **PR** $5.00. **JE** O41, F41, F14, O53. **KW** Openness. Liberalization. Trust. Institutions.

AB The paper reviews the growth performance of different groups of Asian economies, confirms the role of openness as a key factor explaining the growth differences among the Asian economies, and undertakes a preliminary investigation of the role of social capital and institutions. The role of openness in explaining growth differences among the Asian economies appears to be if anything greater than has been established in global samples. Various measures of social capital and institutional quality were not found to add explanatory power, perhaps because of the shortage of comparable data for the Asian economies. It is conjectured that the prospects are good for the technological catchup that has taken place in South-East Asia to be repeated elsewhere in Asia, and especially South Asia, partly in response to recent increases in openness. The role of social capital and institutions in facilitating this catchup remains to be established.

Helpman, Elhanan

TI Intergenerational Redistribution With Short-Lived Governments. **AU** Grossman, Gene M.; Helpman, Elhanan.

TI Intergenerational Redistribution with Short-Lived Governments. **AU** Grossman, Gene M.; Helpman, Elhanan.

TI Common Agency and Coordination: General Theory and Application to Tax Policy. **AU** Dixit, Avinash; Grossman, Gene M.; Helpman, Elhanan.

TI Electoral Competition with Policy Compromise. **AU** Grossman, Gene M.; Helpman, Elhanan.

TI Competing for Endorsements. **AU** Grossman, Gene M.; Helpman, Elhanan.

TI Competing for Endorsements. **AU** Grossman, Gene M.; Helpman, Elhanan.

Henderson, J. Vernon

TI On the Strategic Community Development. **AU** Thisse, Jacques-Francois; Henderson, J. Vernon.

Herguera, Inigo

TI Minimum Quality Standards as Facilitating Devices: An Example With Leapfrogging and Exit. **AU** Lutz, Stefan; Herguera, Inigo.

Herrendorf, Berthold

PD August 1996. **TI** Diversity and Development. **AU** Herrendorf, Berthold; Valentinyi, Akos; Waldmann, Robert. **AA** Herrendorf: University of Warwick. Valentinyi: University of Southampton. Waldman: European University Institute. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9635; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 17. **PR** no charge. **JE** E10, O10. **KW** Aggregation. Diversity. Economic Development. Multiple Equilibria.

AB This paper studies the long run behavior of an economy with two sectors and an externality. We assume that the difference between the cost of entry into the two sectors varies across individuals. Defining a change in diversity as an exogenous mean preserving spread of the distribution of this cost difference, it is shown that a sufficiently high degree of diversity can create a unique and saddle-path stable equilibrium in the neighborhood of any level of economic activity. Consequently, economies with identical aggregate initial conditions may experience completely different long run behavior, even if multiple equilibria are absent. This suggests a theoretical explanation why the conditional convergence hypotheses may not hold.

Hillier, Grant

PD November 1996. **TI** On the Density of the Maximum Likelihood Estimator. **AU** Hillier, Grant; Armstrong, Mark. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9645; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 23. **PR** no charge. **JE** C13. **KW** Maximum Likelihood. Exact Density. Manifolds.

AB The distribution of the maximum likelihood estimator (MLE) is evidently completely determined by its defining property of maximizing the data density at each point in the sample space. Thus, it should be possible to obtain an expression for the density of the MLE that involves only quantities directly available from the likelihood. In particular, the functional form of the estimator in terms of the data, which is often unknown, should not be needed. In this paper we derive an expression for the exact density of the MLE with just these qualities, in the case where the MLE is uniquely defined, at each point in the sample space, by the vanishing of the score vector. The formula we obtain expresses the density at a point as a surface integral over the manifold in the sample space on which the score vector (evaluated at that point) vanishes, and involves only properties of the score itself, and the observed information matrix. We then show that, for i.i.d. observations from a regular exponential model, and for the cases considered by Durbin (1980), this exact formula leads naturally to a simple approximation to the density of the MLE that has relative error uniformly of order 1/n; this is Barndorff-Nielsen's (1980) p*-formula.

Hodrik, Robert J.

TI On Biases in Tests of the Expectations Hypothesis of the Term Structure of Interest Rates. **AU** Bekaert, Geert; Hodrik, Robert J.; Marshall, David A.

Holmstrom, Bengt

PD June 1996. **TI** Private and Public Supply of Liquidity. **AU** Holmstrom, Bengt; Tirole, Jean. **AA** Holmstrom: Massachusetts Institute of Technology. Tirole: IDEI and GREMAQ, Toulouse, CERAS, Paris; and Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 96/21; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 42. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** E32, E44, E62, G21. **KW** Liquidity. Credit Rationing. Financial Contracts.

AB This paper addresses a basic, yet unresolved question: Do claims on private assets provide sufficient liquidity for an efficient functioning of the product 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, we show that these instruments are sufficient for attaining the socially optimal (second-best) contract between investors and firms. Such a contract imposes both a maximum leverage ratio and a liquidity constraint on firms. Intermediaries coordinate the use of liquidity. Without intermediation, scarce liquidity may be wasted and the social optimum may not be attainable. 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 command a liquidity premium over private claims. The government should manage the supply of liquidity by loosening liquidity (boosting the value of its securities) when the aggregate liquidity shock is high and tightening liquidity when the shock is low. The paper thus provides a microeconomic rationale for government-supplied liquidity as well as for an active government policy.

Hooper, Vince

PD September 1996. **TI** Volatility and Openness of Emerging Markets: Some Empirical Evidence. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 310; Department of Economics, The Faculties, Australian National University, Canberra ACT 0200, Australia. **PG** 14. **PR** no charge. **JE** G15, O16. **KW** Factor Analysis. Volatility. Open Economy. Capital Flows. Emerging Markets.

AB This paper provides some empirical evidence on the relationship between the volatility and "openness" of emerging stock markets (ESM's). The primary null hypothesis of this research is that volatility is not correlated with openness. The study uses a factor analysis to condense the number of "openness" attributes to a smaller number of dimensions. Volatility, as measured by the standard deviation of returns the emerging stock market indices over an ex post five year period is regressed against the factors. The findings of this research indicate that the volatility of emerging market is positively correlated with the degree of openness. The results have relevant policy implications for both governments of developing countries who should be aware of the relationship between volatility and openness, and the international investor.

Horn, Henrik

TI Endogenous Mergers in Concentrated Markets. **AU** Persson, Lars; Horn, Henrik.

Horrace, William C.

PD December 1995. **TI** Sampling Errors and Confidence Intervals for Order Statistics: Implementing the Family Support Act. **AU** Horrace, William C.; Schmidt, Peter; Witte, Ann Dryden. **AA** Horrace and Schmidt: Michigan State University. Witte: Florida International University, Wellesley College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5387; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 32. **PR** $5.00. **JE** C14, J13, H72. **KW** Nonparametric Methods. Kernel. Child Care. Massachusetts.

AB The Family Support Act allows states to reimburse child care costs up to the 75th percentile of the local market price for child care. States are required to carry out surveys to estimate these 75th percentiles. For the state of Massachusetts, the authors developed a sampling design that equalized the standard errors of the estimated percentiles across 65 distinct local markets. The authors implement and compare a number of parametric nonparametric methods of density estimation. A kernel estimator provides the most reasonable estimates. The authors selected the Epanechnikov kernel and the Sheather-Jones automatic bandwidth selection procedure. For full-time care, the 75th percentiles ranged from $242 per week for infants in child care centers in Boston to $85 per week for family day care in western Massachusetts.

Horsewood, Nicholas

TI Has the Phillips Curve Been Reborn? **AU** Sinclair, P. J. N.; Horsewood, Nicholas.

Howells, Jeremy

PD March 1996. **TI** The European Dynamics of

Computer Services. **AA** University of Cambridge. **SR** University of Cambridge, ESRC Centre for Business Research Working Papers: WP27; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 24. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** L86, O18, O52. **KW** Computer Services. Computer Software. European Industry.

AB This paper examines the dynamics of the rapidly growing European computer services industry, focusing especially on key technological and industrial changes affecting its recent development, organization and locational evolution. It also considers the changing policy context for computer services within the European Union.

Hubbard, R. Glenn

TI Financing Constraints and Corporate Investment: Response to Kaplan and Zingales. **AU** Fazzari, Steven M.; Hubbard, R. Glenn; Petersen, Bruce C.

Hughes, Alan

TI Takeovers, Institutional Investment and the Persistence of Profits. **AU** Cosh, Andy; Hughes, Alan; Singh, Ajit; Lee, Kevin.

TI Semi-Parametric Estimation of the Company Growth-Size Relation. **AU** Cosh, Andy; Hughes, Alan; Lee, Hyehoon; Pudney, Stephen.

TI Innovation in UK SMEs: Causes and the Consequences for Firm Failure and Acquisition. **AU** Cosh, Andy; Hughes, Alan; Wood, Eric.

TI The Changing Anatomy of Corporate Control and the Market for Executives in the UK. **AU** Cosh, Andy; Hughes, Alan.

Hunt, Jennifer

TI Wage Mobility in the United States. **AU** Buchinsky, Moshe; Hunt, Jennifer.

PD December 1996. **TI** The Response of Wages and Actual Hours Worked to the Reduction of Standard Hours in Germany. **AA** Yale University. **SR** Centre for Economic Policy Research, Discussion Paper: 1526; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 26. **PR** 4 pounds or $8.00. **JE** J23, J31, J51. **KW** Wages. Hours. Unions. Work-Sharing. Employment.

AB A transformation of what had become a universal 40-hour standard working week in Germany began in 1985 with reductions negotiated in the metal-working and printing sectors. These reductions have continued through 1995, and were followed by reductions in other sectors. The union campaign aimed to increase employment through "work-sharing", and is being emulated in the United States with the launch of a reduced hours campaign by the AFL-CIO. Using data from the German Socio-Economic Panel, I find that increased overtime or reduced short time was little used to offset the reduction in standard hours: a one-hour reduction in standard hours appears to have translated into a reduction in actual hours worked of between 0.85 and 1 hour for workers in manufacturing. One might expect this to have resulted in a loss of earnings for workers in affected industries. I substantiate the union's claim of "full wage compensation", however: reductions in standard hours were accompanied by a relative rise in the hourly straight-time wage of 2-3% for each hour fall in standard hours; enough to keep monthly earnings the same as in unaffected industries.

Imbens, Guido W.

TI Jackknife Instrumental Variables Estimation. **AU** Angrist, Joshua D.; Imbens, Guido W.; Krueger, Alan B.

PD October 1995. **TI** Information Theoretic Approaches to Inference in Moment Condition Models. **AU** Imbens, Guido W.; Johnson, Phillip; Spady, Richard H. **AA** Imbens: Harvard University and National Bureau of Economic Research. Spady: Nuffield College. Johnson: Harvard University. **SR** National Bureau of Economic Research Technical Paper: 186; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C13, C51, C52. **KW** Moment Conditions. Generalized Method-of-Moments. Kullback-Liebler Information Criterion.

AB One-step efficient GMM estimation has been developed in the recent papers of Back and Brown (1990), Imbens (1993) and Qin and Lawless (1994). These papers emphasized methods that correspond to using Owen's (1988) method of empirical likelihood to reweight the data so that the reweighted sample obeys all the moment restrictions at the parameter estimates. In this paper we consider an alternative KLIC motivated weighting and show how it and similar discrete reweightings define a class of unconstrained optimization problems which includes GMM as a special case. Such KLIC-motivated reweightings introduce M auxiliary "tilting" parameters, where M is the number of moments; parameter and overidentification hypotheses can be recast in terms of these tilting parameters. Such tests, when appropriately conditioned on the estimates of the original parameters, are often startlingly more effective than their conventional counterparts. This is apparently due to the local ancillarity of the original parameters for the tilting parameters.

Ingram, Peter

TI The Price is Right: Inflation and Nominal Wage Adjustment in Britain. **AU** Brown, Donna; Ingram, Peter; Wadsworth, Jonathan.

PD February 1997. **TI** Free to Choose? Dimensions of Private Sector Wage Contract Re- Negotiation Since 1979. **AU** Ingram, Peter; Wadsworth, Jonathan; Brown, Donna. **AA** Ingram: University of Surrey and London School of Economics. Wadsworth: Royal Holloway College and London School of Economics. Brown: London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 327; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 30. **PR** no charge. **JE** J30, J50. **KW** Wages. Pay Policy. Productivity.

AB The deregulation of the system of pay determination in Britain in 1979 was intended to give employers the freedom to determine wage increases without the restriction of pay norms or statutory limits. Yet thirteen years later, despite a rise in productivity, nominal wage growth and the growth of unit labour costs were still widely perceived as enduring economic problems. This paper addresses the influence of industrial relations institutions and labour market pressures upon wage increases between 1979 and 1994 using evidence from the

CBI's Pay Databank. Despite the direction of government policy, the external institutional forces of the labor market, particularly the rate of inflation and comparability, appear to have exerted an enduring influence on pay determination.

Ishikawa, Jota

PD February 1996. **TI** Rent-Shifting Export Subsidies with an Imported Intermediate Product. **AU** Ishikawa, Jota; Spencer, Barbara J. **AA** Ishikawa: Hitotsubbashi University. Spencer: University of British Columbia and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5458; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 32. **PR** $5.00. **JE** F12, L13. **KW** Export Subsidy. Oligopoly.

AB This paper argues that export subsidies aimed at shifting rents from foreign to domestic producers of a final good may also serve to shift rents to foreign firms supplying an intermediate good, weakening the incentive for the subsidy. By contrast, assuming Cournot competition for both the final and intermediate goods, this second layer of rent- shifting between final and intermediate good firms can strengthen the argument for an export subsidy if intermediate good firms are domestic. The domestic welfare implications of alternative rent-shifting policies (a production subsidy and an import tariff) at the intermediate good stage are also considered.

Ito, Takatoshi

TI One Day in June, 1993: A Study of the Working of Reuters 2000-2 Electronic Foreign Exchange Trading System. **AU** Goodhart, Charles; Ito, Takatoshi; Payne, Richard.

Jack, William

PD March 1997. **TI** Intergenerational Risk Sharing and Health Insurance Financing. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 321; Department of Economics, The Faculties, Australian National University, Canberra ACT 0200, Australia. **PG** 12. **PR** no charge. **JE** H42, I18. **KW** Health Insurance. Community Rating. Risk Sharing.

AB When medical care prices and individual health needs follow stochastic processes with non-zero trends, community rating facilitates lifetime insurance and intergenerational risk sharing. While such policies are unsustainable in competitive private insurance markets, they provide the basis for the financing of public health systems designed to spread risks efficiently.

Jackman, Richard

PD March 1997. **TI** Labour Market Policy and the Reallocation of Labour Across Sectors. **AU** Jackman, Richard; Pauna, Catalin. **AA** Jackman: London School of Economics. Pauna: Queen Mary and Westfield College. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 338; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 39. **PR** no charge. **JE** J60, J68. **KW** Economic Transition. Restructuring. Unemployment.

AB This paper investigates the extent of labor market reallocation across broad industrial sectors in the transition economies of Eastern Europe since 1989. It offers various measures of the magnitude of labor misallocation and the speed and efficiency of reallocation during the first half of the 1980's. It compares the performance of the economies of Eastern Europe with one another and with two Southern European economies, Greece and Portugal, which have also been experiencing substantial economic change. Contrary to much a priori theorizing, the paper finds no correlation between unemployment and the speed or effectiveness of labor market reallocation. The authors argue that the analysis in the paper strengthens the case for an active as against a passive approach to labor market policy.

Jian, Tinalun

PD January 1996. **TI** Trends in Regional Inequality in China. **AU** Jian, Tinalun; Sachs, Jeffrey D.; Warner, Andrew M. **AA** Jian and Warner: Harvard University. Sachs: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5412; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** $5.00. **JE** P21, O53, O11, O18. **KW** Conditional Convergence. Divergence. China. Growth. Rural Development.

AB Several studies have examined the tendency of regions within a nation to exhibit long-term convergence in per capita income levels. In this paper the authors examine the tendency towards convergence among the provinces of China during the period 1952-1993. The authors find that real income convergence of provinces in China has been a relatively recent phenomenon, emerging strongly only since the reform period begin in 1978. During the initial phase of central planning, 1952-1965, there is some evidence for convergence,. During the cultural revolution, 1965- 1978, there is strong evidence of divergence. The authors find strong evidence for convergence during the reform period is associated with rural reforms, and is especially strong within the coastal regions where there has been liberalization of international trade and investment flows. However, since 1990 regional incomes have begun to diverge. Therefore, it seems that China is now on a dual track, with a prosperous and fast growing coastal region and a poor interior growing at a lower rate.

Johnson, Phillip

TI Information Theoretic Approaches to Inference in Moment Condition Models. **AU** Imbens, Guido W.; Johnson, Phillip; Spady, Richard H.

Jones, Charles M.

PD June 1995. **TI** Oil and the Stock Markets. **AU** Jones, Charles M.; Kaul, Gautam. **AA** Jones: Princeton University. Kaul: University of Michigan. **SR** Princeton Financial Research Center Memorandum: 153; Financial Research Center, Princeton University, Department of Economics, Princeton, NJ 08544-1021. **PG** 26. **PR** $3 (domestic mailing), $6 (foreign mailing); make checks payable to Princeton University. **JE** E32, G15, Q43. **KW** Stock Market. Oil Shocks.

AB In this paper, we assess the impact of oil shocks on international stock markets. Within the context of the dividend/cash flow valuation model, we test whether a stock market's reaction to oil shocks in the post-war period can be justified by current and future changes in real cash flows and/or changes in expected returns. We show that the post-war evidence is consistent with the hypothesis that the U.S. and Canadian stock markets are rational: the reaction of stock prices to oil shocks can be completely accounted for by the impact of these shocks on current and future real cash flows alone (even without explicitly accounting for oil-induced changes in expected stock returns). In contrast, we are unable to explain the reaction of the Japanese and the U.K. stock markets to oil shocks in the post-war period. In both countries, innovations in oil prices appear to cause stock prices to change more than can be justified by subsequent changes in real cash flows or by changing expected returns.

PD January 1996. **TI** Public Information and the Persistence of Bond Market Volatility. **AU** Jones, Charles M.; Lamont, Owen; Lumsdaine, Robin. **AA** Jones: Princeton University. Lamont: University of Chicago and National Bureau of Economic Research. Lumsdaine: Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5446; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 14. **PR** $5.00. **JE** G12, E51, D83. **KW** Debt. Volatility. Information.

AB The authors examine the reaction of daily bond prices to the release of government macroeconomic news. These news releases are of interest because they are released on periodic, preannounced dates and because they cause substantial bond market volatility. The news component of volatility is not positively autocorrelated on these dates, since the news is released at a specific moment in time. The authors find (1) expected returns on the short end of the bond market are significantly higher on these announcement dates, and (2) the persistence pattern of daily volatility is quite different around these days.

PD January 1996. **TI** Public Information and the Persistence of Bond Market Volatility. **AU** Jones, Charles M.; Lamont, Owen; Lumsdaine, Robin. **AA** Jones and Lumsdaine: Princeton University. Lamont: University of Chicago. **SR** Princeton Financial Research Center Memorandum: 156; Financial Research Center, Princeton University, Department of Economics, Princeton, NJ 08544-1021. **PG** 14. **PR** $3 (domestic mailing), $6 (foreign mailing); make check payable to Princeton University. **JE** G12, G14. **KW** Public Information. Bond Market Volatility.

AB See abstract for Jones, Charles M., Owen Lamont, and Robin Lumsdaine, January 1996. "Public Information and the Persistence of Bond Market Volatility". National Bureau of Economic Research Working Paper: 5446; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org.

Jovanovic, Boyan

PD October 1995. **TI** A CES Indirect Production Function. **AA** University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 188; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** D24. **KW** *Indirect Production Function. Constant Elasticity of Substitution.*

AB This paper derives an indirect production function that is, in a special case, of a constant elasticity of substitution form. This is not a contribution to the theory of aggregation generally. Instead it is a microfoundation for a specific but popular production function -- the CES -- that helps us express the important concept of the elasticity of substitution in terms of more primitive, and more intuitive concepts of the returns to scale. The paper presents a simple lemma, and then shows that several and diverse applications have a common logical structure: the production function often used in growth theory, the utility when there is household production, human capital theory, and the concept of the aggregate technology shock.

PD December 1995. **TI** Learning and Growth. **AA** University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5383; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 20. **PR** $5.00. **JE** D24, O33, O41, O47. **KW** Growth. Knowledge. Information. Technology Adoption.

AB This survey discusses four sources of growth of knowledge: research, schooling, learning by doing, and training. In trying to disentangle what is important, the following facts are emphasized: (1) even the most advanced countries spend far more on adoption of existing technologies than on inventing new ones, and (2) countries frequently adopt "dominated" technologies. The conclusion is simply this: In generating world growth, the world's research outlays are an essential ingredient. But for most agents the decision determining growth is one of whether to adopt existing technologies. Moreover, the handful of models that surveyed contains a bewildering array of diverse engines of growth, most of which are not based on any firm evidence.

Joyce, Theodore

TI The Effect of Maternal Drug Use on Birth Weight: Measurement Error in Binary Variables. **AU** Kaestner, Robert; Joyce, Theodore; Wehbeh, Hassan.

Ju, Jiandong

PD March 1996. **TI** Market Access and Welfare Effects of Free Trade Areas Without Rules of Origin. **AU** Ju, Jiandong; Krishna, Kala. **AA** Ju: University of Oklahoma. Krishna: Pennsylvania State University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5480; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** $5.00. **JE** D61, F11, F13. **KW** Tariffs. Trade Areas. Openness. Liberalization.

AB The market access and welfare effects of Free Trade Areas (FTA's) without Rules of Origin (ROO's) are studied. The authors consider both the final and intermediate goods markets and their interlinkage. The FTA weakly reduces all tariffs and prices within the FTA. This raises quantity demanded and reduces quantity supplied for both the final and intermediate goods, thereby raising imports. This is the classic trade creation effect and is welfare improving. The authors identify two additional effects which work in the opposite direction and identify conditions under which these welfare reducing, import reducing effects dominate.

Juhn, Chinhui

PD February 1996. **TI** Wage Inequality and Family Labor Supply. **AU** Juhn, Chinhui; Murphy, Kevin M. **AA** Juhn: University of Houston. Murphy: University of Chicago and

National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5459; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** $5.00. **JE** J22, J12, D31, J31. **KW** Wages. Earnings. Women. Gender. Family.

AB Using data from the March CPS and the 1960 Census, this paper describes earnings and employment changes for married couples in different types of households stratified by the husband's hourly wage. While the declines in male employment and earnings have been greatest for low wage men, employment and earnings gains have been largest for wives of middle and high wage men. These findings cast doubt on the notion that married women have increased their labor supply in the recent decades to compensate for the disappointing earnings growth of their husbands. The authors conclude that own wage effects dominate cross effects between husband and wife in accounting for changes in make and female employment.

Junankar, P. N.

PD November 1996. **TI** Unemployment in the OECD: Models and Mysteries. **AU** Junankar, P. N.; Madsen, Jakob B. **AA** Junankar: Australian National University. Madsen: University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9648; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 32. **PR** no charge. **JE** C52, E24, J64. **KW** Unemployment. Panel Data.

AB This paper compares some of the major models used to explain OECD unemployment. We compare the following four models: Layard and Nickell (1986), Bruno and Sachs (1985), McCallum (1986), and Phelps (1992, 1994). The models suggest that the "natural rate of unemployment" has been driven up mainly by wage push factors. Panel data on twenty-two OECD countries is used to investigate the extent to which the four models can explain the increase in the OECD unemployment over the past two decades. Various estimators which yield short-run and long-run estimates are used. Our empirical estimates reveal that coefficients on key variables often turn out with signs which are at odds with the theories or are insignificant and that a second order autoregressive model performs nearly as well as all the other models. The conclusion offers some directions for future research.

Kaestner, Robert

PD January 1996. **TI** The Effect of Maternal Drug Use on Birth Weight: Measurement Error in Binary Variables. **AU** Kaestner, Robert; Joyce, Theodore; Wehbeh, Hassan. **AA** Kaestner and Joyce: City University of New York and National Bureau of Economic Research. Wehbeh: Lutheran Medical Center. **SR** National Bureau of Economic Research Working Paper: 5434; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 19. **PR** $5.00. **JE** I12, J13, C13. **KW** Illegal Drugs. Measurement Error. Survey Data. Birth Weight.

AB This paper develops a method to correct for non-random measurement error in a binary indicator of illicit drugs. Our results suggest that estimates of the effect of self reported prenatal drug use on birth weight are biased upwards by measurement error -- a finding contrary to predictions of a model of random measurement error. The authors show that more accurate estimates of the true effect of drug use on birth weight can be obtained by using the predicted probability of falsely reporting drug use. This suggests that out-of-sample information on drug use may improve estimates of the effect of reported drug use in other settings.

Kahn, Charles

TI The Efficiency of Self-Regulated Payments Systems: Learning from the Suffolk System. **AU** Calomiris, Charles W.; Kahn, Charles.

Kajii, Atsushi

PD December 1996. **TI** Rubinstein's Similarity Consistent Preferences: A Complete Characterization. **AA** University of Isukuba and Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 316; Department of Economics, The Faculties, Australian National University, Canberra ACT 0200, Australia. **PG** 8. **PR** no charge. **JE** D11, D81. **KW** Decision. Utility. Similarity.

AB This paper provides a complete characterization of utility functions that are consistent with similarity relations considered in Rubinstein (1988).

Kaplow, Louis

PD December 1995. **TI** How Tax Complexity and Enforcement Affect the Equity and Efficiency of the Income Tax. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5391; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 21. **PR** $5.00. **JE** H21, H26, D63. **KW** Internal Revenue. Tax Collection. Fairness. Compliance.

AB Much criticism of the income tax involves administration: the enormous complexity of the system is responsible for large compliance costs, pubic and private, and the tax gap is large despite substantial resources devoted to enforcement. The desire for simplification and improved compliance motivates various incremental reforms as well as proposals for fundamental restructuring of the tax system. But evaluation of such changes is difficult because the underlying problems have not been analyzed in terms of the equity and efficiency concerns that animate more familiar assessments of income tax policy. This article provides a framework for a unified analysis, in which the same factors that are used to justify the choice of the tax base and the rate structure are employed to resolve problems involving complexity, compliance costs, and enforcement difficulties.

Katz, Lawrence F.

TI Searching for the Effect of Immigration on the Labor Market. **AU** Borjas, George J.; Freeman, Richard B.; Katz, Lawrence F.

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

Kaul, Gautam

TI Oil and the Stock Markets. **AU** Jones, Charles M.;

Kaul, Gautam.

Keeble, David

PD September 1996. **TI** Small Firms, Innovation and Regional Development in Britain in the 1990s. **AA** University of Cambridge. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP42; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 15. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** L11, O18, O31, R11. **KW** Small Firms. Innovation. Collaboration. Regional Development.

AB This paper analyzes regional variations in the growth, innovativeness and other performance characteristics during the 1990's of a sample of 100 small and medium-sized manufacturing and service enterprises in Britain. Set within a theoretical context provided by Vaessen's critique of regional resource munificence theory, it shows that South East core region firms grew faster than those in peripheral regions, and reported more original innovations, but that the latter had a better record of continuing innovation and higher Research and Development intensity. Significant regional differences in competitive environments and collaborative networking also carry implications for long-term competitiveness.

Kehoe, Patrick J.

TI The Poverty of Nations: A Quantitative Exploration. **AU** Chari, V. V.; Kehoe, Patrick J.; McGrattan, Ellen R.

Kelley, Allen C.

PD January 1995. **TI** Saving, Dependency and Development. **AU** Kelley, Allen C.; Schmidt, Robert M. **AA** Kelley: Duke University. Schmidt: University of Richmond. **SR** Duke University, Department of Economics, Working Paper: 95/01; available only on web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 17. **PR** no charge. **JE** E21, J11. **KW** Savings. Development. Population Growth.

AB It appears that the widely observed finding in the literature showing little or no relationship between population growth (and dependency) and saving requires modification. First, while it is consistent with an update of the hybrid (Keynesian, life-cycle) Leff-type model, in a more clearly interpretable life-cycle framework (a la Mason) the role of democracy is strong over the 30 years, although the form which it takes (life-cycle versus lifetime level) may vary over time and place. Overall, demographic factors accounted for a major portion of changes in saving across countries and over time. These findings appear to be quite robust and relatively insensitive to various samples, estimation procedures, variable definitions, functional forms, and the like.

PD September 1995. **TI** Toward a Cure for the Myopia and Tunnel Vision of the Population Debate: A Dose of Historical Perspective. **AU** Kelley, Allen C.; Schmidt, Robert M. **AA** Kelley: Duke University. Schmidt: University of Richmond. **SR** Duke University, Department of Economics, Working Paper: 95/10; available only on web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 21. **PR** no charge. **JE** J11. **KW** Population Growth. Myopia.

AB Debates about the economic consequences of population growth and size have been too narrow, and they have been too focused on impacts that occur in the short run. Such tunnel vision and myopia have resulted in alarmist assessments. However, when the analysis of the economic impacts is broadened in scope and extended over time, not only are the conclusions altered, but the analysis becomes at once more complex and more reasonable. In short, the pitfalls of misjudging the economic consequences of population growth are attenuated when one gains perspective.

Kelm, Matthias

PD August 1996. **TI** Schumpeter's Theory of Economic Evolution: A Darwinian Interpretation. **AA** University of Cambridge. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP34; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 40. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** B41, D50, E12. **KW** Evolutionary Economics. Schumpeter. Darwinian Theory. Equilibrium Theory.

AB This paper employs a general Darwinian framework to arrive at an interpretation of Schumpeter's work that rings out more clearly its specific evolutionary aspects. In this interpretation, Schumpeter's theory of economic evolution turns out to be still highly relevant to evolutionary economists, because it sheds light on some issues that are of fundamental importance to this approach: the usefulness of Darwinian theory for economics; the precise nature of the evolutionary forces at work in economic systems; and the relationship between evolutionary theory and equilibrium analysis.

PD December 1996. **TI** Evolutionary and 'New' Institutional Economics: Some Implications for Industrial Policy. **AA** McKinsey and Company, Inc. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP46; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 65. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** D20, D82, L20, L52. **KW** Evolutionary Economics. Industrial Policy. Uncertainty. Institutional Economics.

AB This paper aims to explore the potential of evolutionary and new institutional economics to provide theoretical foundations for an enhanced understanding of the potential benefits from, and limitations to, industrial policy in promoting long-run economic growth. The following salient elements of the two approaches, which appear to have important implications for industrial policy, are discussed: the fundamental constraints of bounded rationality and genuine uncertainty, the evolutionary forces driving economic growth, the inherent inefficiencies of economic evolution, the role of institutions and organizations as co-ordination mechanisms, and the problem of selective intervention.

Kelsey, David

TI E-Capacities and the Ellsberg Paradox. **AU** Eichberger, Jurgen; Kelsey, David.

TI Free Riders Do Not Like Uncertainty. **AU** Eichberger, Jurgen; Kelsey, David.

PD April 1996. **TI** Induced Preferences, Non-Additive Probabilities and Multiple Priors. **AU** Kelsey, David; Milne, Frank. **AA** Milne: Queens University. Kelsey: University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/15; Department of

Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 27. **PR** 2 pounds; no charge to students. **JE** D81. **KW** Uncertainty Aversion. Induced Preferences. Choquet Integral. Dempster-Shafer Rule. Multiple Priors.

AB We study a decision-maker who follows the Savage axioms. We show that if s(he) is able to take unobservable actions which influence the probabilities of outcomes then it can appear to an outsider as if his/her subjective probabilities are non-additive. Implications for multi-period decisions are explored. We extend the model to include a second individual who is also able to take a hidden action. We show that this may induce uncertainty-averse preferences over some class of acts, even if the second individual acts to help the decision-maker with high probability.

Kessler, Daniel P.

PD February 1996. **TI** Do Doctors Practice Defensive Medicine? **AU** Kessler, Daniel P.; McClellan, Mark. **AA** Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5466; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 36. **PR** $5.00. **JE** I11, I12, H51. **KW** Liability. Medicine. Medicare. Elderly.

AB "Defensive medicine" is a potentially serious social problem: if fear of liability drives health care providers to administer treatments that do not have worthwhile medical benefits, then the current liability system may generate inefficiencies many times greater than the costs of compensating malpractice claimants. To obtain direct empirical evidence on this question, the authors analyze the effects of malpractice liability reforms using data on all elderly Medicare beneficiaries treated for serious heart disease in 1984, 1987, and 1990. The authors find that malpractice reforms that directly reduce provider liability pressure lead to reductions of 5 to 9 percent in medical expenditures without substantial effects on mortality or medical complications. The authors conclude that liability reforms can reduce defensive medical practices.

Keuschnigg, Christian

PD November 1996. **TI** Business Formation and Aggregate Investment. **AA** Universitat des Saarlandes. **SR** Centre for Economic Policy Research, Discussion Paper: 1515; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 31. **PR** 4 pounds or $8.00. **JE** E62, H23, L16. **KW** Monopolistic Competition. Business Formation. Capital Accumulation.

AB The paper proposes an intertemporal equilibrium model with monopolistic competition and start-up investment with variable capacity to explain the nexus between business formation and medium-run growth. An investment externality is identified that results in under- accumulation of capital in the decentralized market equilibrium and, thus, creates investment multipliers. Some form of investment promotion is called for. The paper compares the effectiveness of policies to promote small business formation with a general investment tax credit.

Key, Nigel

TI Agricultural and Rural Development Policy in Latin America: New Directions and New Challenges. **AU** de Janvry, Alain; Key, Nigel; Sadoulet, Elisabeth.

Khan, M. Ali

PD October 1996. **TI** Hyperfinite Asset Pricing Theory. **AU** Khan, M. Ali; Sun, Yeneng. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1139; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 59. **PR** no charge. **JE** D46, D81, G11, G12. **KW** Asset Pricing. Capital-Asset-Pricing Model. Arbitrage Pricing Theory. Naive Diversification. Efficient Diversification.

AB We present a model of a financial market which unifies the capital- asset-pricing model (CAPM) of Sharpe-Lintner, and the arbitrage pricing theory (APT) of Ross. The model is based on a recent theory of hyperfinite processes, and it uncovers asset pricing phenomena which cannot be treated by classical methods, and whose asymptotic counterparts are not already, or even readily, apparent in the setting of a large but finite number of assets. In the model, an asset's unexpected return can be decomposed into a systematic and an unsystematic part, as in the APT, and the systematic part further decomposed into an essential and inessential part, as in the CAPM. This tri-partite decomposition leads to a pricing formula expressed in terms of a beta that is based on a specific index portfolio identifying essential risk, and constructed from factors and factor loadings that are endogenously extracted from the process of asset returns. Furthermore, the valuation formulas of the two individual theories imply, and are implied by, the pervasive economic principle of no arbitrage.

Kiefer, Nicholas

TI Fitting Equilibrium Search Models to Labor Market Data. **AU** Bowlus, Audra J.; Kiefer, Nicholas; Neumann, George.

Kim, Dongwook

TI Schooling, Labor Force Quality, and Economic Growth. **AU** Hanushek, Eric A.; Kim, Dongwook.

King, Stephen P.

TI A Model of Myopic Corporate Behaviour with Efficient Stock Markets and Optimal Management Incentive Contracts. **AU** Garvey, Gerald T.; Grant, Simon; King, Stephen P.

Kitson, Michael

PD September 1996. **TI** The Fiscal and Distributional Implications of Job Generation. **AU** Kitson, Michael; Michie, Jonathan; Sutherland, Holly. **AA** University of Cambridge. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP37; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 19. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** H20, H30, J23, J64. **KW** Job Generation. Unemployment. National Minimum Wage.

AB This paper estimates the cost of a public investment-led job creation program for the United Kingdom. A program creating an additional one million jobs at the current average wage would involve a net cost to the Treasury dramatically lower than the gross cost; 17 billion pounds worth of spending would result in net cost of around 7 billion pounds. Given that even a partial restoration of progressive taxation would bring in more than half this net amount, improved living standards could be brought about relatively easily provided dogmatic objections to public sector initiatives can become.

Klemperer, Paul

PD November 1996. **TI** The Generalized War of Attrition. **AU** Klemperer, Paul; Bulow, Jeremy. **AA** Klemperer: Yale University and Stanford University. Bulow: Oxford University. **SR** Yale Cowles Foundation Discussion Paper: 1142; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 24. **PR** no charge. **JE** D43, D44, L13, O30. **KW** War of Attrition. Auctions. Natural Monopoly. Oligopoly. Political Decision Making.

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

Knight, John L.

PD June 1995. **TI** Statistical Modelling of Asymmetric Risk in Asset Returns. **AU** Knight, John L.; Satchell, Stephen E.; Tran, Kien C. **AA** Knight: University of Western Ontario. Satchell: Birkbeck College. Tran: University of Saskatchewan. **SR** Birkbeck Discussion Paper in Financial Economics: FE/05/95; Birkbeck College, Department of Economics, 7/15 Gresse Street, London W1P 2LL, England. **PG** 18. **PR** no charge. **JE** D82, G12, G14. **KW** Asset Returns. Asymmetric Risk.

AB The purpose of this article is to provide a straight forward model for asset returns which captures the fundamental asymmetry in upwards versus downwards returns. We model this feature by using scale gamma distributions for the conditional distributions of positive and negative returns. By allowing the parameters for positive returns to differ from parameters for negative returns we can test the hypothesis of symmetry. Some applications of this process to expected utility calculations, trading rules and temporal aggregation are considered. Finally we estimate the model using daily UK FT1OO index and Futures data.

Kollintzas, Tryphon

PD November 1996. **TI** A Stochastic Dynamic General Equilibrium Model for Greece. **AU** Kollintzas, Tryphon; Vassilatos, Vanghelis. **AA** Athens Institute of Economic Policy Studies. **SR** Centre for Economic Policy Research, Discussion Paper: 1518; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 22. **PR** 4 pounds or $8.00. **JE** E32, E60, F31, F41. **KW** Growth. Business Cycles. Taxes. Open Economy. Greece.

AB In this paper we develop a stochastic dynamic general equilibrium model of the Greek economy, in the real business cycle modeling tradition. Household preferences depend on private and public consumption and leisure. Government finances its investment, consumption and transfer payments by means of a proportional income tax rate. Households buy and sell foreign assets in an international capital market and also receive transfer payments from abroad. The volatility, persistence, and co-movement properties of the business cycle component of the data generated by the model are broadly consistent with the actual behavior of the corresponding actual data of the Greek economy in 1960-92. We use the model to investigate the response of major macroeconomic variables to temporary and permanent changes in government policy variables, foreign transfers and the rate of return on foreign assets.

Koman, Reinhard

TI Human Capital and Macroeconomic Growth: Austria and Germany 1960- 1992. **AU** Marin, Dalia; Koman, Reinhard.

Kopp, Raymond

TI Temporal Reliability of Estimates from Contingent Valuation. **AU** Carson, Richard; Hanemann, Michael; Kopp, Raymond; Krosnick, Jon; Mitchell, Robert; Presser, Stanley; Ruud, Paul; Smith, Kerry; Conaway, Michael; Martin, Kerry.

Korenman, Sanders

PD July 1995. **TI** Refining Estimates of Marital Status Differences in Mortality at Older Ages. **AU** Korenman, Sanders; Goldman, Noreen; Fu, Haishan. **AA** Korenman: University of Minnesota and National Bureau of Economic Research. Goldman: Princeton University. Fu: University of Pennsylvania. **SR** National Bureau of Economic Research Technical Paper: 182; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** I12, J12, J14. **KW** Marital Status. Health. Mortality. Bereavement. Elderly.

AB The main objective of this analysis is to demonstrate that some of the limitations that have characterized recent studies of the relationship between marital status and health outcomes may result in biased estimates of marital status differences in mortality among the elderly. A secondary goal is to evaluate the strength of evidence in support of the excess risks of mortality associated with widowhood, once we are able to eliminate or mitigate many of the limitations experienced by other studies. Our results, based on the 1984-1990 Longitudinal Study of Aging, demonstrate that the estimated marital status effects in logit and hazard models of survival are very sensitive to whether and how marital status information is updated after the baseline interview. Refined measures of marital status that capture prospectively transitions from the married to the widowhood state result in substantially increased estimates of the relative risk of dying in the early durations of widowhood (bereavement).

Kortian, Tro

PD November 1996. **TI** Australian Financial Market Volatility: An Exploration of Cross- Country and Cross-Market Linkages. **AU** Kortian, Tro; O'Regan, James. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia, Research Discussion Paper: 9609; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. **PG** 57. **PR** no charge. **JE** F30, G15. **KW** International Markets. Market Volatility. Volatility Spillovers. Volatility Asymmetries.

AB This paper examines the behavior of daily asset price movements in Australian bond, share and foreign exchange markets over the period 1987 to 1996. The paper finds no compelling evidence to suggest the presence of a trend increase in volatility over the period. Evidence does exist, however, of quite significant cross-country contagion effects on Australia's bond and equity markets. For both of these markets, the U.S. appears to be the predominant foreign market influence. Indications of asymmetries in the behavior of Australian financial market volatility are also apparent. Bond and share market volatility is found to be higher in bear markets than in bull markets, and higher following a market fall than in a market rise.

Kowalczyk, Carsten

PD January 1996. **TI** Tariff Phase-Outs: Theory and Evidence from GATT and NAFTA. **AU** Kowalczyk, Carsten; Davis, Donald. **AA** Kowalczyk: Tufts University and National Bureau of Economic Research. Davis: Harvard University. **SR** National Bureau of Economic Research Working Paper: 5421; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 22. **PR** $5.00. **JE** F13, F15. **KW** Tariffs. GATT. Nafta. Mexico.

AB This paper considers tariff phase-outs in multilateral and preferential agreements. The paper finds that early GATT rounds primarily were over bindings of existing rates and that it was not until the 1962-67 Kennedy Round's 50 percent reduction in manufactured goods tariffs that time paths of tariff reductions became a substantive part of GATT agreements. Existing empirical work has demonstrated that U.S. industries with high initial tariffs tended to receive long periods for tariff adjustment or tended to be exempted from agreed reductions in both the Kennedy and Tokyo Rounds. This paper demonstrates that high U.S. tariffs and little intra-industry trade are associated with long NAFTA phase-out periods for U.S. imports from Mexico. Mexico's phase- outs are correlated, on the other hand, with those of the United States but not generally with Mexico's tariffs.

Kraay, Aart

PD July 1997. **TI** Current Accounts in Debtor and Creditor Countries. **AU** Kraay, Aart; Ventura, Jaume. **AA** Kraay: The World Bank. Ventura: Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 97/12; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 57. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** E32, F32. **KW** Current Account. Temporary Shocks.

AB This paper reexamines a classic question in international economics: what is the current account response to a transitory income shock such as a temporary improvement in the terms of trade, a transfer from abroad or unusually high production? To answer this question, we construct a world equilibrium model in which productivity varies across countries and international borrowing and lending takes place to exploit good investment opportunities. Despite its conventional ingredients, the model generates the novel prediction that favorable income shocks lead to current account deficits in debtor countries and current account surpluses in creditor countries. Evidence from thirteen OECD countries broadly supports this prediction of the theory.

Kramarz, Francis

TI A La Recherche Des Moments Perdus: Covariance Models for Unbalanced Panels with Endogenous Death. **AU** Abowd, John M.; Crepon, Bruno; Kramarz, Francis; Trognon, Alain.

Kremer, Michael

PD January 1996. **TI** Integrating Behavioral Choice Into Epidemiological Models of Aids. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5428; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** $5.00. **JE** D81, I12, J17, H51. **KW** Public Health. HIV. AIDS. Adverse Selection.

AB Increased HIV risk creates incentives for people with low sexual activity to reduce their activity, but may make high-activity people fatalistic, leading them to reduce their activity only slightly, or actually increase it. If high-activity people reduce their activity by a smaller proportion than low-activity people, the composition of the pool of available partners will worsen, creating positive feedbacks, and possibly multiple steady states levels of prevalence. The timing of public health efforts may affect long-run HIV prevalence.

TI Disorganization. **AU** Blanchard, Olivier; Kremer, Michael.

Krishna, Kala

PD January 1996. **TI** Whither Flat Panel Displays? **AU** Krishna, Kala; Thursby, Marie. **AA** Krishna: Pennsylvania State University and National Bureau of Economic Research. Thursby: Purdue University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5415; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** $5.00. **JE** L63, H43, D62, O33. **KW** Research Subsidy. Flat Panel. Television. Electronics.

AB This paper examines possible consequences of subsidies to R&D and to volume production proposed under the Clinton administration's flat panel display initiative. The authors do this in the context of a model in which firms behave competitively in the short run, while realizing that their choices of capacity and yield-improving R&D in the medium and long run will affect market price. Policy simulations show that steady state yields and profits are lower, while prices are higher with subsidies for capacity acquisition than with R&D subsidies. This occurs because a firm's incentives to do R&D are diminished by a subsidy on capacity costs.

TI Market Access and Welfare Effects of Free Trade Areas Without Rules of Origin. **AU** Ju, Jiandong; Krishna, Kala.

Krishna, Vijay

PD February 1997. **TI** (Anti-) Competitive Effects of Joint Bidding and Bidder Restrictions. **AU** Krishna, Vijay; Morgan, John. **AA** Krishna: Penn State University. Morgan: Princeton University. **SR** Princeton Woodrow Wilson School, Discussion Paper in Economics: 184; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. **PG** 19. **PR** no charge. **JE** D44, L50. **KW** Auctions. Joint Bidding.

AB We show that in second-price common value auctions apparently anti- competitive practices such as joint bidding and bidder participation restrictions do not necessarily lead to anti-competitive outcomes. On the contrary, they always lead to more aggressive bidding and may even lead to greater revenue for the seller.

Krosnick, Jon

TI Temporal Reliability of Estimates from Contingent Valuation. **AU** Carson, Richard; Hanemann, Michael; Kopp, Raymond; Krosnick, Jon; Mitchell, Robert; Presser, Stanley; Ruud, Paul; Smith, Kerry; Conaway, Michael; Martin, Kerry.

TI Temporal Reliability of Estimates from Contingent Valuation. **AU** Carson, Richard; Hanemann, Michael; Kopp, Raymond; Krosnick, Jon; Mitchell, Robert; Presser, Stanley; Ruud, Paul; Smith, Kerry; Conaway, Michael; Martin, Kerry.

Krueger, Alan B.

TI Jackknife Instrumental Variables Estimation. **AU** Angrist, Joshua D.; Imbens, Guido W.; Krueger, Alan B.

TI Labor Market Effects of School Quality: Theory and Evidence. **AU** Card, David; Krueger, Alan B.

Krugman, Paul

PD March 1996. **TI** Domestic Distortions and the Deindustrialization Hypothesis. **AA** Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5473; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** $5.00. **JE** F11, F41, F43, D31, O41. **KW** Growth. Inequality. Domestic Distortions. Service Sector. Skills.

AB It is widely believed that U.S. trade deficits have displaced workers from highly paid manufacturing jobs into less well-paid service employment, contributing to declining incomes for the nation as a whole. Although proponents of this view do not usually think of it this way, this analysis falls squarely into the "domestic distortions" framework pioneered by Jagdish Bhagwati. This paper models the deindustrialization hypothesis explicitly as a domestic distortions issue, and shows that while it makes conceptual sense it is of limited quantitative importance.

Kulasi, Farida

TI Current Account Solvency and the Feldstein-Horioka Puzzle. **AU** Coakley, Jerry; Kulasi, Farida; Smith, Ron.

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

TI Promoting an Effective Market Economy in a Changing World. **AU** Buiter, Willem H.; Lago, Ricardo; Stern, N.

Laidler, David

PD October 1996. **TI** American Macroeconomics Between World War I and the Depression. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Report: RR/9606; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. **PG** 57. **PR** $10.00. **JE** E50, N12. **KW** Central Banks. Monetary Policies.

AB In the 1920's and early 1930's there existed a vigorous, diverse, and distinctly American literature dealing with monetary theory and policy, as well as the business cycle. The contributors to this literature did not work in isolation; they drew freely upon European sources, and Europeans in turn drew freely upon American contributions. Economics in the United States was certainly distinct at this time, but it was anything but provincial. Its distinctiveness was partly a matter of the originality of individual contributors, but in the macroeconomic field in particular, it also stemmed from the fact that, in the 1920's, the economic climate in the United States was very different from that prevailing in Europe.

PD October 1996. **TI** Notes on the Microfoundations of Monetary Economics. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Report: RR/9610; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. **PG** 19. **PR** $10.00. **JE** E50. **KW** Microeconomics. Monetary Exchange.

AB not available.

PD March 1997. **TI** More on Hawtrey, Harvard and Chicago. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Report: 9704; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. **PG** 17. **PR** $10.00. **JE** B22. **KW** Chicago Thought. Hawtrey. Monetary Policy. Chicago School.

AB In this paper, I discuss in turn: the views of Hawtrey (eg. 1925) and Friedman (eg. 1974) on the powers of monetary and fiscal policy, and contrast them with those of Douglas and Director (1931) to which Tavlas draws attention; the role of monetary factors in causing and exacerbating the Great Contraction of 1929-1933, and what monetary policy might have accomplished to mitigate it, as seen by Hawtrey (1932), Currie (1934a&b), Friedman and Schwartz (1963) and Douglas (1933, 1935); and the relationship between Douglas' work and that of some of his Chicago colleagues. I shall conclude that the skepticism I expressed in (1993) about the uniqueness in the early 1930's of a Chicago tradition to which Friedman's work is related remains well justified.

Lamont, Owen

PD December 1995. **TI** Do "Shortages" Cause Inflation? **AA** University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5402; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 15. **PR** $5.00. **JE** E31, E22, E51. **KW** Shortages. Disequilibrium. Inflation. Prices. Inventory.

AB I count the number of times per month that the word "shortage" appears on the front page of The Wall Street Journal and The New York Times for the period 1969-1994. Using this as a general measure of shortages in the U.S. economy, I test whether shortages help predict inflation. Using a variety of different specifications, I find that this time-series measure of shortages strongly predicts inflation, and contains information not captured by commodity prices, monetary aggregates, interest rates, and other proposed predictors of inflation. This suggests that disequilibrium was an important part of the adjustment of prices to macroeconomic shocks during this period.

TI Public Information and the Persistence of Bond Market Volatility. **AU** Jones, Charles M.; Lamont, Owen; Lumsdaine, Robin.

TI Public Information and the Persistence of Bond Market Volatility. **AU** Jones, Charles M.; Lamont, Owen; Lumsdaine, Robin.

Lane, Christel

PD September 1996. **TI** The Role of Technical Standards in the Social Regulation of Supplier Relations in Britain and Germany. **AA** University of Cambridge. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP39; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 27. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** K20, L14, L20. **KW** Trade Associations. Technical Standards. Contract Law. Supplier Relations. Trust.

AB This paper is concerned to show that different national systems of social institutions result in divergent levels of trust and cooperation in supplier relations. An analysis of institutionalized rule systems, particularly of technical standards, traces their impact on various aspects of supplier relations in Britain and Germany and attempts some evaluation of performance outcomes. Drawing on a theoretical framework which combines the insights of New Institutionalism in economics and sociology, it is shown that a higher degree of stability and consistency in systems of social regulation in Germany than in Britain leads to more consensual and predictable relations between firms in which the development of mutual trust encourages more long-term and closer technical collaboration. The paper presents data from a recent comparative study of supplier relations conducted within the Centre for Business Research and supplements them with information from more comprehensive studies of legal and technical regulation in the two countries.

Lau, Sau-Him Paul

PD January 1997. **TI** Aggregate Pattern of Time Dependent Adjustment Rules, II: Strategic Complementarity and Endogenous Nonsynchronization. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 317; Department of Economics, The Faculties, Australian National University, Canberra ACT 0200, Australia. **PG** 25. **PR** no charge. **JE** E30, L16. **KW** Interdependence. Strategic Complementarity. Endogenous Nonsynchronization.

AB This paper provides an explanation for an important institutional feature of staggered time-dependent adjustment rules assumed in a number of macroeconomic models (Fischer, 1977; Taylor, 1980; Blanchard, 1986). It identifies strategic complementarity as the crucial factor leading to nonsynchronization is the equilibrium outcome in an infinite-horizon game in which strategic complementarity is present and each of the players chooses repeatedly both the contract length and a strategic variable. By pursuing Tirole's (1988) interpretation of a nonsynchronized-move dynamic game as a series of games with "symmetric Stackelberg leadership", it is further suggested that the relationship between strategic complementarity and the benefit to the Stackelberg follower provides the insight to the game-theoretic explanation of nonsynchronization. The results of this paper reveal a link between strategic complementarity and nonsychronization -- two important macroeconomic features.

Lazear, Edward P.

PD January 1996. **TI** Relational Investing: The Worker's Perspective. **AU** Lazear, Edward P.; Freeman, Richard B. **AA** Lazear: Stanford University and National Bureau of Economic Research. Freeman: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5436; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** $5.00. **JE** J65, J54, G32. **KW** Capital Ownership. Severance Packages.

AB Workers who hold a firm's stock make decisions other than those that pure capital owners would make, but there exists institutions and compensation packages that will generally lead workers to favor efficient firm decisions. Workers care about their firm-specific rents and may seek shares in their firms to use them to protect those rents. The workers most favorable to efficient firm decisions are the very young and very old, who have the least amount to lose in employment rent and those with larger shares of ownership. An appropriate severance pay policy will induce workers to choose efficient outcomes even if it calls for their own layoffs. Single company based defined contribution pension funds, which hold shares in their own firm, are likely to tilt worker- owners to favor efficient decisions when layoffs and other changes are modest, but not when the changes are huge. Pension funds are more likely to buy up shares and successfully change behavior in small firms, in firms that are highly levered, and when the investment community has diverse views on the benefits from changing a firm's current irresponsible policies.

PD January 1996. **TI** Incentives in Basic Research. **AA** Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5444; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 40. **PR** $5.00. **JE** D61, D23, L84. **KW** Incentives. Institutions. Science. Research.

AB Individuals involved in basic research, like other workers, respond to incentives. Funding agencies create implicit incentives when they specify the rules by which awards are made. The following analysis is an exercise in understanding incentives at an applied level. Specific rules are examined and analyzed to determine their incentive effects. For example, what is the effect of rewarding past effort? What happens when a few large awards are replaced by many small awards? How does the timing of an award affect effort? How does an agency choose which topics to fund? After having mapped out the responses of researchers to rule, socially optimal rules are derived. Research incentive issues have private business analogues, and the extension of the operation of the firm is discussed briefly.

Leahy, Dermot

PD January 1997. **TI** Strategic Trade Policy When Firms Have Different Efficiency Levels. **AU** Leahy, Dermot; Montagna, Catia. **AA** Leahy: University College Dublin.

Montagna: University of Dundee. **SR** Centre for Economic Policy Research Discussion Paper: 1549; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 16. **PR** 4 pounds or $8.00. **JE** F12, L13. **KW** Trade Policy. Export Subsidies. Heterogeneous Firms.

AB In this paper we examine optimal strategic trade policy under oligopoly with many home and foreign firms when the firms have different levels of efficiency. The first-best policy involves a structure of firm-specific export subsidies and export taxes in which the government favors the most efficient firms unless the social cost of government funds is sufficiently high. When optimal policy is constrained to a uniform subsidy the optimal policy depends on the relative number of home and foreign firms and the curvature of demand. Deficiencies of the uniform subsidy are examined.

Leamer, Edward E.

PD January 1996. **TI** In Search of Stolper-Samuelson Effects on U.S. Wages. **AA** University of California, Los Angeles and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5427; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 36. **PR** $5.00. **JE** J31, F11, D51, D31. **KW** Inequality. Skills. Trade.

AB One plausible model that links external product markets to internal labor markets is the Heckscher-Ohlin-Samuelson general equilibrium model; this model may prove useful for studying wage differentials arising from international trade. According to this model the Asian growth leads to declines in prices of labor intensive tradables in the U.S.. These price reductions twist the labor demand curve, dictating lower real wages for unskilled workers who reside in communities with abundant unskilled labor but raising the wages for unskilled workers who are fortunate to live in communities inhabited mostly by skilled workers. U.S. relative producer prices of labor-intensive tradables did decline in the 1970's by about 30 percent. These product price declines are compatible in the long run with real wage reductions totaling almost 40 percent for unskilled workers. In the 1980's however, changes in U.S. producer prices worked in favor of these low-wage workers, raising their equilibrium wages by about 20 percent. If total factor productivity (TFP) improvements had not generated any product price response, the TFP improvements in the 1970's call for a 100 percent increase in earnings of nonproduction workers and a 60 percent reduction in earnings of production workers.

PD February 1996. **TI** What's the Use of Factor Contents? **AA** University of California, Los Angeles and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5448; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 16. **PR** $5.00. **JE** F11, F13, D11, D31. **KW** Trade. Imports. Inequality.

AB The net imports of labor embodied in international trade has been a fairly small and stable share of the U.S. labor force. From this some conclude that trade has not been a major contributor to the income inequality trends. This is a non sequitur. The labor embodied in trade is jointly determined by tastes, technologies, factor supplies and the external goods market. Although it is impossible to use factor contents to disentangle trade from technology, the factor contents can be used to suggest the change of earnings shares if the country were to close down external trade entirely. However, this is a proper application of factor contents only if tastes and technologies are log-linear, if trade is balanced and if foreign input intensities are used to compute factor contents of non-competing imports. Factor contents are virtually useless if technologies and tastes are not log-linear, or if the external deficit is substantial and variable. Factor contents do not tell us anything about earnings levels. They also do not inform us of the impact of partial trade barriers that change relative product prices but do not completely eliminate trade.

Ledyard, John O.

PD February 1996. **TI** Interim Efficiency in a Public Goods Problem. **AU** Ledyard, John O.; Palfrey, Thomas R. **AA** Ledyard: California Institute of Technology. Palfrey: CREST-LEI and California Institute of Technology. **SR** Caltech Social Science Working Paper: 956; Division of the Humanities and Social Sciences, MC 228-77, California Institute of Technology, Pasadena, CA 91125. Website: www.hss.caltech.edu/SSWP.htm/. **PG** 20. **PR** no charge. **JE** O20. **KW** Public Goods. Mechanism Design. Referendum. Interim Efficiency. Incentive Compatibility.

AB In a Bayesian environment with independent values and a discrete public good, the interim efficient allocation rules involve a virtual cost-benefit analysis and incentive taxes. Compared to the classical Lindahl-Samuelson solution there are generally distortions that depend on the welfare weights because the efficient way to reduce the tax burden on low-valuation (resp: high-valuation) consumers is to reduce (resp: increase) the level of provision of the public good. We also show there is a dominant strategy mechanism, a referendum, that approximates the performance of the optimal mechanism in large populations. In this mechanism, individuals vote for or against. If a sufficiently large fraction are in favor the good is provided and costs are distributed equally across the population. Otherwise the good is not produced.

Lee, Chin-Chin

TI Efficiency Gains from Quasi-Differencing Under Nonstationarity. **AU** Phillips, Peter C. B.; Lee, Chin-Chin.

Lee, Hyehoon

TI Semi-Parametric Estimation of the Company Growth-Size Relation. **AU** Cosh, Andy; Hughes, Alan; Lee, Hyehoon; Pudney, Stephen.

Lee, In Ho

PD September 1996. **TI** Equilibrium Borrowing and Lending with Bankruptcy. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9640; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 15. **PR** no charge. **JE** C72, F34, G20. **KW** Debt. Bankruptcy. Markov Perfect Equilibrium.

AB In the long-term relationship between a borrower and a lender there is a time inconsistency problem because the lender cannot make a binding commitment with respect to credit limits. We examine the consequences of the time inconsistency in a two-person game based on Hellwig (1977). We completely characterize the Markov Perfect Equilibria (MPE) of the game for various cases. The MPE of the game is such that for certain parameter values, there is a credit constraint even when there is no informational asymmetry or repayment enforcement problem. Moreover, the credit constraint is not necessarily removed by raising the interest rate applied to the loan, since the borrower may withdraw from the loan market if the interest rate is too high.

Lee, Kevin

TI Takeovers, Institutional Investment and the Persistence of Profits. **AU** Cosh, Andy; Hughes, Alan; Singh, Ajit; Lee, Kevin.

Leith, J. Clark

PD January 1997. **TI** Botswana's International Trade Policies. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Report: 9701; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. **PG** 19. **PR** $10.00. **JE** F13, F14, O55. **KW** Botswana. Trade Policies.

AB Botswana's policy interventions in the arena of international trade are more varied and complex than most countries'. Botswana simultaneously is a member of a customs union with one group of neighboring countries, has a free trade agreement with another, participates in a highly successful cartel governing its principal export, has preferential access to a large, highly protected market for another major export, and has pursued an exchange rate policy which has led to the accumulation of 2 years worth of current account payments. In addition, negotiations are currently underway to overhaul the customs union, and to add overlapping free trade agreements between the customs union and several more neighbors, and another one with the European Union. Overall then, it is clear that Botswana's trade patterns have been influenced significantly by a wide ranging set of trade policies. This mix of policies is in part the result of historical accident, and in part the outcome of deliberate choices made by the authorities over the years. The purpose of this paper is to describe the main features of the policies, and identify their principal effects. In the process, a number of important issues in negotiations and policy discussions currently underway are highlighted.

PD January 1997. **TI** Growth and Structural Transformation in Botswana. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Report: 9702; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. **PG** 18. **PR** $10.00. **JE** O40, O55. **KW** Botswana. Growth. Structural Transformation.

AB In the three decades since Independence, Botswana"s economy has grown rapidly, increasing GDP per capita many times over. This did not happen simply with all inputs and outputs growing at the same rates. Rather, the mix of inputs and outputs, and the output per unit of input, changed dramatically also. At Independence, economics activities were predominantly unskilled labor- and land- intensive, with little capital employed. In the intervening decades, the economy has become a much more intensive user of skilled labor, capital and mineral resources. This paper is concerned about Botswana's growth, structural transformation, and the connection between the two. First, the growth of inputs is reviewed, followed by a consideration of the growth of outputs. Then, the changing share of output is considered relative to the factor intensity of production. This leads to a consideration of the relationship between inputs and outputs, namely productivity. Finally, some of the key policy choices which have influenced the results are reviewed.

Leshchenko, Larisa

TI Ownership Structures, Patterns of Control and Enterprise Behavior in Russia. **AU** Earle, John; Estrin, Saul; Leshchenko, Larisa.

Levin, Andrew T.

TI Inferences from Parametric and Non-Parametric Covariance Matrix Estimation Procedures. **AU** den Haan, Wouter J.; Levin, Andrew T.

TI A Practitioner's Guide to Robust Covariance Matrix Estimation. **AU** den Haan, Wouter J.; Levin, Andrew T.

Lewis, Karen K.

PD January 1996. **TI** Consumption, Stock Returns, and the Gains from International Risk- Sharing. **AA** University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5410; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** $5.00. **JE** D91, G12, D12, F21, G11. **KW** Foreign Stocks. Optimal Portfolio. Uncertainty. Risk Aversion.

AB Standard theoretical models predict that domestic residents should diversify their portfolios into foreign assets much more than observed in practice. Whether this lack of diversification is important depends upon the potential gains from risk-sharing. General equilibrium models and consumption data tend to find that the costs are small, typically less than 1/2 percent of permanent consumption. On the other hand, stock returns imply gains that are several hundred times larger. In this paper, I examine the reasons for these differences. I find that the primary differences are due to either: (a) the much higher variability of stocks, and/or (b) the higher degree of risk aversion required to reconcile an international equity premium. On the other hand, the significant differences do not arise treating stock returns as exogenous.

Libecap, Gary D.

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

Lichtenberg, Frank R.

PD January 1996. **TI** The Effect of Pharmaceutical Utilization and Innovation of Hospitalization and Mortality. **AA** Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5418; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** $5.00. **JE** I12, I11. **KW** Medicine. Hospitalization. Prescription Drugs.

AB This paper presents an econometric analysis of the effect of changes in the quantity and type of pharmaceuticals prescribed by physicians in outpatient visits on rates of hospitalization, surgical procedure, mortality, and related variables. It examines the statistical relationship across diseases between changes in outpatient pharmaceutical utilization and changes in inpatient care utilization and mortality during the period 1980-92. The estimates indicate that the number of hospital stays, bed-days, and surgical procedures declined most rapidly for those diagnoses with the greatest increase in the total number of drugs prescribed and the greatest change in the distribution of drugs, by molecule. The estimates imply that an increase of 100 prescriptions is associated with 1.48 fewer hospital admissions, 16.3 fewer hospital days, and 3.36 fewer inpatient surgical procedures. A $1 increase in pharmaceutical expenditure is associated with a $3.65 reduction in hospital care expenditure.

Lindbeck, Assar

PD December 1995. **TI** Restructuring Production and Work. **AU** Lindbeck, Assar; Snower, Dennis J. **AA** Assar: University of Stockholm. Snower: Birkbeck College. **SR** Birkbeck College Discussion Papers in Economics: 12/95; Birkbeck College, Department of Economics, 7/15 Gresse Street, London W1P 2LL, England. **PG** 35. **PR** no charge. **JE** J23, J24, L23, M12, O33. **KW** Restructuring. Technological Change. Information Flows. Employment. Labor Market Segmentation.

AB The paper analyzes the contemporary organizational restructuring of production and work and derives some salient implications for the labor market. The analysis focuses on the switch from occupational specialization at "Tayloristic" organizations to multi-tasking at "holistic" organizations. The restructuring process is shown to create demands for new combinations of skills and thereby "resegment" the labor market, raising the wages and job opportunities of some workers relative to others.

Lindholm, Asa

PD August 1996. **TI** An Economic System of Technology-Related Acquisitions and Spin-Offs. **AA** Chalmers University of Technology. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP33; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 22. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** L22, O32. **KW** Technology-Based Firms. Acquisitions. Spin-Offs.

AB This paper argues that an economic system of large and small technology based firms which interact through technology-related acquisitions and spin-offs can be highly conducive to overall innovativeness and growth. Based on Williamson's (1975) suggestion of a "systems solution by classical specialization", and the empirical research on Swedish technology-based firms reported by Lindholm (1994), an "extended systems approach" is proposed and presented in this paper. This extended system includes the process by which firms spin off small technology-based firms for possible acquisition so that a market for technology-based firms is created as a supplement to other forms of technology markets.

PD December 1996. **TI** Acquisition and Growth of Technology-Based Firms. **AA** Chalmers University of Technology. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP47; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 28. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** L11, O31, O32, O34. **KW** Acquisitions. Technology-Based Firms. Small Firms. Firm Growth.

AB This study reports the results of an empirical analysis of acquisitions and growth of small technology-based firms. Three issues are focused upon: (1) the importance of technology-based acquisitions among large Swedish companies; (2) the growth patterns of acquired and non-acquired small technology-based firms (STBF's); and (3) factors explaining the growth among STBF's. The results indicate that technology-based acquisitions are increasingly important for the sourcing of technology among large Swedish manufacturing companies. For the STBF's, growth was found to be higher among the acquired firms than among the non-acquired firms, both before and after the acquisition. In a regression, an acquisition was found to influence growth positively. Finally, among explanatory factors critical for post-acquisition growth are the fulfillment of the buyers' and sellers' motives along with the realization of technological synergies.

Linton, Oliver B.

PD August 1996. **TI** The Limiting Behavior of Kernel Estimates of the Lyapunov Exponent for Stochastic Times Series. **AU** Linton, Oliver B.; Whang, Yoon-Jae. **AA** Ewha University and Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1130; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 26. **PR** no charge. **JE** C12. **KW** Kernel. Lyapunov Exponent.

AB This paper derives the asymptotic distribution of a kernel based estimator of the Lyapunov exponent for a stochastic time series. We also construct consistent confidence intervals. Our procedures are applied to exchange rate data.

PD November 1996. **TI** Conditional Independence Restrictions: Testing and Estimation. **AU** Linton, Oliver B.; Gozalo, Pedro. **AA** Yale University and Brown University. **SR** Yale Cowles Foundation Discussion Paper: 1140; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 48. **PR** no charge. **JE** C12, C14, C15, C52. **KW** Conditional Independence. Empirical Distribution. Independence. Nonparametric. Smooth Bootstrap. Test.

AB We propose a nonparametric empirical distribution function based test of a hypothesis of conditional independence between variables of interest. This hypothesis is of interest both for model specification purposes, parametric and semiparametric, and for non-model based testing of economic hypotheses. We allow for both discrete variables and estimated parameters. The asymptotic null distribution of the test statistic is a functional of a Gaussian process. A bootstrap procedure is proposed for calculating the critical values. Our test has power against alternatives at distance n to the -1/2 from the null; this result holding independently of dimension. Monte Carlo simulations provide evidence on size and power. Finally, we invert the test statistic to provide a method for estimating the parameters identified through the conditional independence restriction. They are asymptotically normal at rate root-n.

PD February 1997. **TI** Some Higher Order Theory for a Consistent Nonparametric Model Specification Test. **AU** Linton, Oliver B.; Fan, Yanqin. **AA** Linton: Yale University. Fan: University of Windsor. **SR** Yale Cowles Foundation Discussion Paper: 1148; Yale University, Cowles

Foundation Library, Box 208281, New Haven, CT 06520. **PG** 47. **PR** no charge. **JE** C12, C14, C15, C21, C52. **KW** Consistent Test. Edgeworth Expansion. Kernel Estimation. Nonlinear Regression.
AB We provide second order theory for a smoothing-based model specification test. We derive the asymptotic cumulants and justify an Edgeworth distributional approximation valid to order close to the inverse of n. This is used to define size-corrected critical values whose null rejection frequency improves on the normal critical values. Our simulations confirm the efficacy of this method in moderate sized samples.

PD April 1997. **TI** Second-Order Approximations for Semiparametric Instrumental Variable Estimators and Test Statistics. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1151; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 84. **PR** no charge. **JE** C50, C12. **KW** Bandwidth Choice. Instrumental Variable. Kernel Estimation. Second Order. Semiparametric.
AB We construct second-order asymptotic expansions to the first four cumulants of a kernel-based version of the nonlinear semiparametric instrumental variable estimator considered in Newey (1990) as well as a Wald statistic derived from it. The expansions are valid to order n to the minus two epsilon in distribution for some epsilon, where epsilon between zero and one half depends on the smoothness and dimensionality of the data distribution. We use the expansions to define optimal bandwidth selection methods for both estimation and testing problems and apply our methods to simulated data.

Lipsey, Robert E.
PD December 1995. **TI** Internationalized Production in World Output. **AU** Lipsey, Robert E.; Blomstrom, Magnus; Ramstetter, Eric. **AA** Lipsey: National Bureau of Economic Research. Blomstrom: Stockholm School of Economics and National Bureau of Economic Research. Ramstetter: Kansai University. **SR** National Bureau of Economic Research Working Paper: 5385; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 61. **PR** $5.00. **JE** F23, F21, F02. **KW** Multinational Corporation. Trade. Globalization.
AB Internationalized production, that is, production by multinational firms outside their home countries, has increased over the last two decades, but it was still, in 1990, only about 7 percent of world output. The share was higher, at 15 percent in "industry," including manufacturing, trade, construction, and public utilities, but it was negligible in "services," which are about 60 percent of world output. Given all the attention that "globalization" has received from scholars, international organizations, and the press, these numbers are a reminder of how large a proportion of economic activity is confined to single geographical locations and home country ownership. Internationalization of production is clearly growing in importance, but the vast majority of production is still carried out by national producers within their own borders.

Lopez, Jose A.
TI Modeling Volatility Dynamics. **AU** Diebold, Francis X.; Lopez, Jose A.

TI Forecast Evaluation and Combination. **AU** Diebold, Francis X.; Lopez, Jose A.

Louri, Helen
TI Inventory Behaviour: A Comparative Study of UK and Japanese Firms. **AU** Corbett, Jenny; Hay, Donald; Louri, Helen.

Lu, Maozu
TI Dynamic Structure of Disequilibrium Models. **AU** Qin, Duo; Lu, Maozu.

Lumsdaine, Robin
TI Public Information and the Persistence of Bond Market Volatility. **AU** Jones, Charles M.; Lamont, Owen; Lumsdaine, Robin.

TI Public Information and the Persistence of Bond Market Volatility. **AU** Jones, Charles M.; Lamont, Owen; Lumsdaine, Robin.

Lutz, Stefan
PD November 1996. **TI** Minimum Quality Standards as Facilitating Devices: An Example With Leapfrogging and Exit. **AU** Lutz, Stefan; Herguera, Inigo. **AA** Lutz: London School of Economics. Herguera: Universidad Carlos III de Madrid. **SR** Centre for Economic Policy Research, Discussion Paper: 1522; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 7. **PR** 4 pounds or $8.00. **JE** F12, F13, L13. **KW** Product Differentiation. Oligopoly. Quality. Leapfrogging. Country Asymmetries.
AB The recent extensive study of vertical product differentiation models has allowed for the analysis of international trade issues in the presence of country asymmetries in terms of product qualities, technology, costs, market size, and income. In the presence of such asymmetries, national industries will either be market leaders or be lagging behind in the international market place in terms of their product qualities. The resulting asymmetry in profits creates powerful incentives for lagging industries as well as their national governments to reverse this situation to their advantage, i.e. to induce "leapfrogging" in terms of product qualities. This note presents an example where a minimum quality standard facilitates leapfrogging as well as exit of the foreign firm.

Machin, Stephen
PD June 1996. **TI** Technology and Changes in Skill Structure: Evidence From an International Panel of Industries. **AU** Machin, Stephen; Ryan, Annette; Van Reenen, John. **AA** Machin: University College London and London School of Economics. Ryan and Van Reenen: University College London and Institute for Fiscal Studies. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 297; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 38. **PR** no charge. **JE** J51, O33. **KW** Employment. Skills. Technology. Research and Development.
AB Much of the dramatic change in skill and wage structure observed in recent years in the United States is believed to stem from the impact of new technology. This paper compares the changing skill structure of wages and employment in the United States with three other advanced developed countries -- the UK (where wage inequality has risen even faster in the

1980's than in the U.S.), Denmark (where unemployment has risen, but wage inequality has not grown very much) and Sweden (where wage inequality and unemployment has remained stable over our sample). We investigate how far technical change can explain the growth in the importance of more highly skilled workers and find that the growth of the share of skilled workers (by occupation or education) has occurred in all countries. Like the U.S., most of this shift towards an increased usage of more skilled workers has occurred within industries. Furthermore, evidence of the complementarity of human capital with physical capital and with new technology is uncovered in all four countries. Nevertheless, technology can only account for a relatively small part (about 1/4) of the changes in the skill structure of the labor market in the Anglo-American nations. In Sweden, however, a substantial part of the change is accounted for by technology.

MaCurdy, Thomas

TI Cause-Specific Mortality Among Medicare Enrollees. **AU** Bhattacharya, Jay; Garber, Alan M.; MaCurdy, Thomas.

Madsen, Jakob B.

PD November 1996. **TI** On Errors in Variable Bias in Estimates of Export Price Elasticities. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9647; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 8. **PR** no charge. **JE** C51, F10. **KW** Errors-in-Variables. Export Elasticities. Import Elasticities.

AB The literature has long suggested that estimates of export price elasticities are biased toward -1, because both export unit values and export quantities are error ridden. However, the fact that the competitor's prices are also measured with error and hence affect the asymptotic bias, has been overlooked in the literature. Taking this aspect into account, price elasticity estimates in log levels are likely to be unbiased, while price elasticities in the first difference estimates are likely to be biased toward 0.

TI Unemployment in the OECD: Models and Mysteries. **AU** Junankar, P. N.; Madsen, Jakob B.

PD November 1996. **TI** The Constant Term Fallacy in Estimates of the NAIRU. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9649; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 20. **PR** no charge. **JE** E24, E31. **KW** NAIRU. OECD Countries. Co-Start Term Correction.

AB Using the two-equation approach empirical studies find that the NAIRU has been fluctuating around a constant mean of several percentage points over the past decades in the OECD countries. This mean is calculated from the constant terms carried over from the wage and price growth equations. In this paper I show that a high proportion of the constant terms is a statistical artifact and suggest a new method which yields approximately unbiased estimates of the time-invariant NAIRU. Using data for the OECD countries it is shown that the constant term correction lowers the unadjusted time-invariant NAIRU by approximately a half.

TI A Model of Employment and Real Wages Under Imperfect Competition. **AU** Grey, Matthew; Madsen, Jakob B.

PD December 1996. **TI** Errors-in-Variables, Supply Side Effects, and Price Elasticities in Foreign Trade. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9651; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 22. **PR** no charge. **JE** C51, F10. **KW** Errors-in-Variables. Price Elasticities. Foreign Trade.

AB Price elasticities in foreign trade are likely to be biased due to error-in-variables, omission of supply side influences, aggregation, and bad measurement of price competitiveness. This paper incorporates the supply side into the traditional demand for export equation and uses a panel data approach for OECD manufacturing to provide unbiased estimates of price elasticities. The estimates indicate that the sum of import and export price elasticities is numerically close to 1 and that currency depreciations are likely to affect trade balances adversely in the long run.

Maggi, Giovanni

PD May 1996. **TI** The Value of Trade Agreements in the Presence of Political Pressures. **AU** Maggi, Giovanni; Rodriguez-Clare, Andres. **AA** Maggi: Princeton University. Rodriguez-Clare: University of Chicago. **SR** Princeton Woodrow Wilson School, Discussion Paper in Economics: 180; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. **PG** 25. **PR** no charge. **JE** D72, F13. **KW** Trade Agreements. Lobbying.

AB An argument often heard in favor of trade agreements is that they provide a way for a government to credibly distance itself from the domestic special interest groups who lobby for protection; the idea is that, by committing to free trade, a government may be able to foreclose political pressures at home. But recent models of endogenous protection, such as Grossman-Helpman (1994), suggest that a government may prefer to leave the door open to interest-group pressures rather than foreclosing them, since the government derives rents from the political pressures. In this paper we develop a dynamic, small-country model in which factors are sector-specific in the short run but mobile across sectors in the long run, and show that the rents derived from the political process may not compensate the government for the welfare distortions caused by protection. We find, among other things, that a government is more likely to join a free-trade agreement when its bargaining power vis a vis special interest groups is low, and that the parameter capturing the government's responsiveness to political contributions has a non- monotonic impact on the government's trade-off.

Malcomson, James M.

TI Contracts for the National Health Service. **AU** Chalkley, Martin; Malcomson, James M.

Malkiel, Burton G.

PD December 1995. **TI** The Structure of Stock Market Volatility. **AU** Malkiel, Burton G.; Xu, Yexiao.

AA Princeton University. **SR** Princeton Financial Research Center Memorandum: 154; Financial Research Center, Princeton University, Department of Economics, Princeton, NJ 08544-1021. **PG** 29. **PR** $3 (domestic mailing), $6 (foreign mailing); make check payable to Princeton University. **JE** G10. **KW** Market Volatility. Idiosyncratic Volatility. Institutional Ownership. Asymmetric Information.

AB This paper uses a disaggregated approach to study the behavior of stock market volatility. While volatility for the market as a whole has been remarkably stable over time, and has actually decreased in recent years, the volatility of individual stocks appears to have increased. We suggest that the growing presence of institutional investors in the market may have influenced the apparent increase in the idiosyncratic volatility of individual securities. Furthermore we find evidence that idiosyncratic volatility may play a role in cross-sectional return studies such as those done by Fama and French (1992).

Manacorda, Marco

PD September 1996. **TI** Skill Mismatch and Unemployment in OECD Countries. **AU** Manacorda, Marco; Petrongolo, Barbara. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 307; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 26. **PR** no charge. **JE** E24, J31. **KW** Unemployment. Still Mismatch. Sectoral Shifts.

AB This paper uses evidence on employment, labor force, and wage differentials by skills from a number of OECD countries to investigate on the characteristics and the consequences of a skill-biased shift in the structure of labor demand and labor supply. A convex relationship between wages bargained and unemployment is adopted as the non-competitive element that allows such sectoral shocks to have aggregate effects. The model is then calibrated using U.S. and British data. The analysis predicts that nearly a half of the increase in unemployment experienced in Britain over the past two decades can be attributed to an unbalanced evolution in demand and supply of skills, while in the U.S. the impact of this imbalance was fully offset by counter-acting forces.

TI Qualifications and the Labour Market in Britain: 1984-94 Skill Biased Change in the Demand for Labour or Credentialism? **AU** Robinson, Peter; Manacorda, Marco.

Manzini, Paola

TI On the Foundations of Wage Bargaining. **AU** Snower, Dennis J.; Manzini, Paola.

Margo, Robert A.

PD December 1995. **TI** Changes in the Distribution of Wages, 1940-1950: The Public vs. The Private Sector. **AU** Margo, Robert A.; Finegan, T. Aldrich. **AA** Margo: Vanderbilt University and National Bureau of Economic Research. Finegan: Vanderbilt University. **SR** National Bureau of Economic Research Working Paper: 5389; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** $5.00. **JE** N32, D31, J31. **KW** Wages. Inequality. Public Employment.

AB Between 1940 and 1950 wage differentials within and between labor market groups narrowed significantly -- the so-called "Great Compression". This paper disaggregates the Great Compression into its public and private components. Wage compression in the public sector, along with a decline in the pay premia received by public sector workers, explains about 40 percent of aggregate wage compression in the 1940's. The experience of the 1940's stands in stark contrast with that of the past two decades, in which a rigid public sector wage structure has dampened increases in aggregate wage inequality.

Marin, Dalia

PD January 1997. **TI** Human Capital and Macroeconomic Growth: Austria and Germany 1960- 1992. **AU** Marin, Dalia; Koman, Reinhard. **AA** Marin: Humboldt University Berlin. Koman: Institut fur Hohere Studien. **SR** Centre for Economic Policy Research Discussion Paper: 1551; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 24. **PR** 4 pounds or $8.00. **JE** J24, O11, O30, O40. **KW** Economic Growth. Development. Technical Change. Human Capital.

AB In an influential paper Mankiw, Romer and Weil (1992) argue that evidence on the international disparity in levels of per-capita income and rates of growth is consistent with a standard Solow model, once it has been augmented to include human capital as an accumulable factor. In a study on Austria and Germany we augment the Solow model to allow for the accumulation of human capital. Based on a perpetual inventory estimation procedure we construct an aggregate measure of the stock of human capital of Austria and Germany by weighting workers of different schooling levels with their respective wage income. We obtain an estimate of the wage income of workers with different schooling from a Mincer-type wage equation. We find that the time-series evidence on Austria and Germany is not consistent with a human capital augmented Solow model. Factor accumulation appears to be less able to account for the cross-country growth performance of Austria and Germany when human capital accumulation is included in the analysis. We then test an alternative model in which human capital acts as a vehicle of knowledge flows. We find some support for a positive role for human capital in both countries.

Marion, Nancy

TI Volatility, Investment and Disappointment Aversion. **AU** Aizenman, Joshua; Marion, Nancy.

Marshall, David A.

TI On Biases in Tests of the Expectations Hypothesis of the Term Structure of Interest Rates. **AU** Bekaert, Geert; Hodrik, Robert J.; Marshall, David A.

Martin, Philippe

PD November 1996. **TI** Growing Locations: Industry Location in a Model of Endogenous Growth. **AU** Martin, Philippe; Ottaviano, Gianmarco I. P. **AA** Martin: Graduate Institute of International Studies. Ottaviano: Universita di Bologna. **SR** Centre for Economic Policy Research, Discussion Paper: 1523; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 26. **PR** 4 pounds or $8.00. **JE** F43, O30, R12. **KW** Endogenous Growth. New Geography. Research and Development.

AB This paper constructs a model of endogenous growth and endogenous industry location where the two interact. We show that with global spillovers in research and development, a high growth rate and a high level of transaction costs are associated with relocation of the newly created firms to the South (the location with a low initial human capital). With local spillovers in research and development, this activity will be agglomerated in the North and the rate of innovation will increase with the concentration of firms in the North. This in turn implies that a decrease of transaction costs through, for example, trade integration, will increase the growth rate because it leads to a higher industrial concentration of firms where the research and development is located. We show that industrial concentration improves welfare only for low enough transaction costs and high enough spillovers.

PD November 1996. **TI** Growth and Agglomeration. **AU** Martin, Philippe; Ottaviano, Gianmarco I. P. **AA** Martin: Graduate Institute of International Studies. Ottaviano: Universita di Bologna. **SR** Centre for Economic Policy Research, Discussion Paper: 1529; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 22. **PR** 4 pounds or $8.00. **JE** O31, O41, R11, R12. **KW** Endogenous Growth. Agglomeration. Technological Progress. Cities.

AB This paper presents a model in which growth and geographic agglomeration of economic activities are mutually self reinforcing processes. Industrial agglomeration in one location spurs growth because it reduces the cost of innovation in that location through a pecuniary externality due to transaction costs. Growth fosters agglomeration because as the sector at the origin of innovation expands, new firms tend to locate close to this sector. The model can be interpreted as illustrating one mechanism behind the emergence of cities seen as centers for production and innovation, and is consistent with the episodes of simultaneous increases in growth rates and spatial agglomeration.

Martin, Ron

PD December 1996. **TI** Slow Convergence? Post-Neoclassical Endogenous Growth Theory and Regional Development. **AU** Martin, Ron; Sunley, Peter. **AA** Martin: University of Cambridge. Sunley: University of Edinburgh. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP44; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 33. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** O18, O33, R11, R13, R58. **KW** Endogenous Growth. Regional Convergence. Human Capital. Technology. Externalities.

AB There has recently been a revival of interest in economic growth, and especially in the evidence for long-run convergence in per capita incomes and output between countries. This empirical debate has promoted the development of endogenous growth theory, which seeks to move beyond conventional neoclassical theory by treating as endogenous those factors that the neoclassical growth model relegates as exogenous, in particular, technological change and human capital. The economists who have been at the forefront of the formulation of endogenous growth theory and the new growth empirics have begun to use long-run regional growth patterns to test and develop their ideas. Their analyses suggest a slow and discontinuous process of regional convergence. This paper considers whether endogenous growth theory can help explain this finding. It argues that endogenous growth theory has some important regional implications, but also some limitations when applied to a regional context. It advocates an exchange of ideas between endogenous growth theory and the more descriptive focus on "indigenous" growth that is now popular in economic geography.

McClellan, Mark

TI Do Doctors Practice Defensive Medicine? **AU** Kessler, Daniel P.; McClellan, Mark.

McDonald, Bradley

TI The Multilateral Trade Agenda: Uruguay Round Implementation and Beyond. **AU** Francois, Joseph F.; McDonald, Bradley.

McDougall, Robert

TI Trade Shocks and the Magnitude of Transmitted Wage Adjustments. **AU** Falvey, Rod; Tyers, Rod; McDougall, Robert.

McGrattan, Ellen R.

TI The Poverty of Nations: A Quantitative Exploration. **AU** Chari, V. V.; Kehoe, Patrick J.; McGrattan, Ellen R.

McGuire, Paul

TI Stochastic Algorithms for Dynamic Models: Markov Perfect Equilibrium, and the 'Curse' of Dimensionality. **AU** Pakes, Ariel; McGuire, Paul.

Meagher, Kieron J.

PD September 1996. **TI** Efficient Hierarchies: Equivalence Under Differing Employment Regimes. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 309; Department of Economics, The Faculties, Australian National University, Canberra ACT 0200, Australia. **PG** 26. **PR** no charge. **JE** D23, D83. **KW** Organizations. Decentralization. Parallel Processing.

AB A major criticism of the information processing hierarchy model of management structure pioneered by Radner and Van Zandt is that it is unrealistic in its description of labor. This paper shows how the existing model can be extended to use labor hours instead of just the number of people employed. This allows the analysis of hierarchies to include realistic employment regimes such as salaries and piece rates. The sets of efficient hierarchies under these new, more realistic employment regimes are derived. Surprisingly, it shows that equivalencies hold between some of these new sets. This new approach using hours as well as the number of employees has empirical implications, with hours growing at a faster rate than employees as a firm grows. The final section of the paper extends the existing information processing model to include the possibility that people can be unreliable. In particular, people can make mistakes in the tasks they are assigned, or they can be late in reporting the result of their processing. These reliability concepts are developed here for choosing amongst sets of efficient hierarchies. They also suggest how incentive considerations can be introduced into the information processing model.

Menezes, Flavio M.

PD November 1996. **TI** A Note on Auctions with Endogenous Participation. **AU** Menezes, Flavio M.;

Monteiro, Paulo K. **AA** Menezes: Australian National University. Monteiro: Instituto de Matematica Pura e Aplicada. **SR** Australian National University Working Paper in Economics and Econometrics: 312; Department of Economics, The Faculties, Australian National University, Canberra ACT 0200, Australia. **PG** 18. **PR** no charge. **JE** D44. **KW** Endogenous Participation. Revenue Equivalence. Entry Fees. Potential Competition. Optimal Auction.

AB In this paper, we study an auction where bidders only know the number of potential applicants. After seeing their values for the object, bidders decide whether or not to enter the auction. Players may not want to enter the auction since they have to pay participation costs. We characterize the optimal bidding strategies for both first- and second- price sealed-bid auction when participation is endogenous. We show that only bidders with values grater than a certain cut-off point will bid in these auctions. In this context, both auctions generate the same expected revenue. We also show that, contrarily to the predictions of the fixed-n literature, the seller's expected revenue may decrease when the number of potential participants increases. In addition, we show that it is optimal for the seller to charge an entry fee, which contrasts greatly with results from the existing literature on auctions with entry.

Meschi, Meloria

TI Unions and Wages in 1984 and 1990: Evidence From Cross Sections of the Establishments in the UK. **AU** Driffill, John; Meschi, Meloria.

Metcalf, David

TI It's Not What You Pay It's the Way That You Pay It and That's What Get Results: Jockey's Pay and Performance. **AU** Fernie, Sue; Metcalf, David.

Metcalf, Gilbert E.

PD March 1995. **TI** Investment Under Alternative Return Assumptions: Comparing Random Walks and Mean Reversion. **AU** Metcalf, Gilbert E.; Hassett, Kevin. **AA** Metcalf: Tufts University and National Bureau of Economic Research. Hassett: Board of Governors of the Federal Reserve System. **SR** National Bureau of Economic Research Technical Paper: 175; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C22, E22. **KW** Brownian Motion. Mean Reversion. Investment.

AB Many recent theoretical papers have come under attack for modeling prices as Geometric Brownian Motion. This process can diverge over time, implying that firms facing this price process can earn infinite profits. We explore the significance of this attack and contrast investment under Geometric Brownian Motion with investment assuming mean reversion. While analytically more complex, mean reversion in many cases is a more plausible assumption, allowing for supply responses to increasing prices. We show that cumulative investment is generally unaffected by the use of a mean reversion process rather than Geometric Brownian Motion and provide an explanation for this result.

Meyer, Bruce D.

PD January 1996. **TI** Repeat Use of Unemployment Insurance. **AU** Meyer, Bruce D.; Rosenbaum, Dan T. **AA** Meyer: Northwestern University and National Bureau of Economic Research. Rosenbaum: Northwestern University. **SR** National Bureau of Economic Research Working Paper: 5423; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 20. **PR** $5.00. **JE** J65, J64, D61. **KW** Unemployment Insurance. Duration. Seasonality. Moral Hazard.

AB The authors examine the extent to which unemployment insurance (UI) insures workers against unforeseen events or subsidizes firms and workers engaged in temporary layoffs. Our main source of data is a 5- year panel of UI administrative records from five states. While most claimants receive UI only once during this period, nearly forty percent of claims go to those individuals with three or more years of receipt during the 5-year period. Most repeat recipients are concentrated in seasonal industries and are laid off by the same employer each time. The authors also find that middle-aged and high-paid workers are most likely to be repeat recipients, suggesting that workers in bad jobs are not the individuals who repeatedly receive UI.

Michalska, Grazyna

PD May 1995. **TI** Implications of GATT for Eastern Europe and the Baltics. **AU** Michalska, Grazyna; Goodhue, Rachael; Small, Arthur. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 750; 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** 99. **PR** 25 cents per page domestic; 50 cents per page foreign. **JE** F14. **KW** GATT. Commercial Policy. Agricultural Policy. Economic Development. Privatization.

AB The story of agriculture in Eastern Europe during the last quarter century is a story of policy driven by politics, rather than by sound economics. Even in the highly distorted economies of the socialist period, agricultural policy stands out as being singularly colored by ideological imperatives, and singularly vulnerable to interest group pressures. While the revolutions of 1989-91 did mark a sharp move toward liberalization, these moves are now being slowed and even reversed, as countries of the region adopt Western style interventionism in preparation for accession to the European Union.

Michie, Jonathan

TI The Fiscal and Distributional Implications of Job Generation. **AU** Kitson, Michael; Michie, Jonathan; Sutherland, Holly.

PD September 1996. **TI** Competition and Competitive Advantage. **AU** Michie, Jonathan; Prendergast, Renee. **AA** Michie: University of Cambridge. Prendergast: Queen's University. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP41; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 18. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** D20, H11, L10, L20, L50. **KW** Deregulation. Competitive Advantage. Technological Innovation. Industrial Policy.

AB From the late 1970's onwards, the view that government intervention could provide a means of overcoming market failure in advanced economies was increasingly questioned. For some, intervention was to be discouraged because it interfered with individual liberty. For others, what was problematic was the welfare economist's assumption of an autonomous state acting in the public interest. Finally, there was the issue of the state's ability to achieve what it set out to do. Government failure it was argued was just as pervasive as market failure and no antidote to it. This paper critically evaluates such arguments in relation to competition, industrial change, innovation and competitive advantage in production.

Milesi-Ferretti, Gian Maria

PD February 1996. **TI** Sustainability of Persistent Current Account Deficits. **AU** Milesi-Ferretti, Gian Maria; Razin, Assaf. **AA** Milesi-Ferretti: International Monetary Fund. Razin: International Monetary Fund and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5467; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 20. **PR** $5.00. **JE** F31, F32. **KW** Current Account. Solvency. Bankruptcy. Currency Crisis.

AB This paper puts forward a notion of current account sustainability that explicitly takes into account willingness to pay and willingness to lend in addition to intertemporal solvency. It argues that this notion of sustainability provides a better framework for understanding the variety of country experiences with protracted current account imbalances. Based on this notion, the authors identify a number of operational indicators related to the structure of the economy, the economic policy stance, and political economy factors. The authors use these sustainability indicators to evaluate the experience of a number of countries that ran persistent current account imbalances, and derive policy implications consistent with our notion of sustainability.

Miller, Marcus H.

PD November 1996. **TI** Hyperinflation and Stabilization: Cagan Revisited. **AU** Miller, Marcus H.; Zhang, Lei. **AA** University of Warwick. **SR** Centre for Economic Policy Research, Discussion Paper: 1513; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 15. **PR** 4 pounds or $8.00. **JE** E31, E62. **KW** Seigniorage. Hyperinflation. Fiscal Stabilization. Stochastic Deficits. Cagan.

AB Using a variant of the Cagan model with rational expectations, this paper shows that expected stabilization can result in a budget deficit in excess of the maximum inflation tax. A cap on the deficit dampens inflation expectations and raises real balances, thus increasing the yield of the inflation tax for any given rate of inflation. This study extends the work of Drazen and Helpman (1990) by including a stochastic budgetary process and using option pricing theory. It uses parameter values of the semi-elasticity of demand for money to provide estimates of the maximum viable real deficit.

Million, Andreas

TI Economic Incentives and Hospitalization in Germany. **AU** Zimmermann, Klaus F.; Geil, Peter; Million, Andreas; Rotte, Ralph.

Milne, Frank

TI Induced Preferences, Non-Additive Probabilities and Multiple Priors. **AU** Kelsey, David; Milne, Frank.

Mishkin, Frederic S.

PD February 1996. **TI** The Channels of Monetary Transmission: Lessons for Monetary Policy. **AA** Federal Reserve Bank of New York and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5464; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** $5.00. **JE** E12, G12, E52, E43. **KW** Monetary Policy. Credit View. Liquidity Effect.

AB This paper provides an overview of the transmission mechanisms of monetary policy, starting with traditional interest rate channels, going on to channels operating through other asset prices, and then on to the so-called credit channels. The paper then discusses the implications from this literature for how central banks might best conduct monetary policy.

Mocan, H. Naci

TI A Time-Series Analysis of Crime and Drug Use in New York City. **AU** Corman, Hope; Mocan, H. Naci.

Moffitt, Robert A.

PD October 1995. **TI** Selection Bias Adjustment in Treatment-Effect Models as a Method of Aggregation. **AA** Johns Hopkins University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 187; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C24, C25, C51, C52. **KW** Selection Bias. Treatment-Effect Models. Instrumental Variables.

AB The aim of this note is to interpret estimation of the conventional treatment-effect selection-bias model in econometrics as a method of aggregation and to draw the implications of this interpretation. In addition, the paper notes the connection of this interpretation with an older style of analysis using grouped data and illustrates the aggregation analogy with examples from the literature. The estimation used to illustrate the points is the method of instrumental variables.

Montagna, Catia

TI Strategic Trade Policy When Firms Have Different Efficiency Levels. **AU** Leahy, Dermot; Montagna, Catia.

Monteiro, Paulo K.

TI A Note on Auctions with Endogenous Participation. **AU** Menezes, Flavio M.; Monteiro, Paulo K.

Moresi, Serge

TI Front-Running by Mutual Fund Managers: It Ain't That Bad. **AU** Danthine, Jean-Pierre; Moresi, Serge.

Morgan, John

PD September 1996. **TI** Financing Public Goods by Means of Lotteries. **AA** Princeton University. **SR** Princeton Woodrow Wilson School, Discussion Paper in Economics: 183; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. **PG** 29. **PR** no charge. **JE** D44, H41. **KW** Public Goods. Lotteries.

AB When viewed as taxes, lotteries are routinely criticized as being both inequitable and inefficient. But is this an entirely fair comparison? Frequently lotteries are used in lieu of voluntary contributions by private charities and governments when taxes are not feasible. In this paper, a model of equilibrium wagering behavior in lotteries, whose proceeds will be used to fund a public good, is considered. Relative to voluntary contributions, wagers in the unique lottery equilibrium (a) increase the provision of the public good, (b) are welfare improving, and (c) provide levels of the public good close to first-best as the lottery prize increases.

TI (Anti-) Competitive Effects of Joint Bidding and Bidder Restrictions. **AU** Krishna, Vijay; Morgan, John.

PD March 1997. **TI** Funding Public Goods with Lotteries: Experimental Evidence. **AU** Morgan, John; Sefton, Martin. **AA** Morgan: Princeton University. Sefton: University of Iowa. **SR** Princeton Woodrow Wilson School, Discussion Paper in Economics: 185; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. **PG** 23. **PR** no charge. **JE** D44, H41. **KW** Public Goods. Lotteries. Experiments.
AB Why do individuals participate in charitable gambling and state-run lotteries? In contrast to previous explanations that rely on risk- preference or pure love of gambling motives, we present a model where risk-neutral expected utility maximizers explicitly recognize that lotteries are being used to finance public goods. The model predicts that: a) individuals have an incentive to purchase lottery tickets; b) such a lottery will generate greater public good provision than would be attained from voluntary contributions; c) net of the cost of prizes, public goods provision is increasing in prize amounts; and d) lotteries cannot be used to finance socially undesirable public goods. We then investigate the efficacy of the lottery mechanism in laboratory public good environments. The first experiment we report involves a sharp test of the prediction that lotteries will out-perform voluntary contributions. In our voluntary contribution treatment, subjects' contributions to public goods average around 25-30 percent of endowments. In our lottery treatment we introduce a lottery into this environment and find average contributions to be well predicted by the Nash equilibrium. After accounting for the cost of awarding prizes in the lottery, we find that the lottery mechanism increases public good provision, as predicted.

TI Necessary and Sufficient Conditions for Existence and Uniqueness of Bertrand Paradox Outcomes. **AU** Baye, Michael R.; Morgan, John.

PD May 1997. **TI** The Effects of Endogenous Information Acquisition About Business Risk on Audit Pricing. **AU** Morgan, John; Stocken, Phillip. **AA** Morgan: Princeton University. Stocken: University of Pennsylvania. **SR** Princeton Woodrow Wilson School, Discussion Paper in Economics: 187; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. **PG** 25. **PR** no charge. **JE** D44, M41. **KW** Business Risk. Audit Pricing. Endogenous Information.
AB This paper examines the pricing of business risk by homogenous auditors in a two-period model. Incumbent auditors optimally determine the amount of information to acquire about the business risk of a client. They subsequently compete in prices with prospective auditors. In such an environment, we show that there exists differential turnover between high and low risk firms; cross-subsidization of the audit fees of high risk firms by low risk firms; and low-balling by auditors. Moreover, we show how changes in the timing and magnitude of litigation events as well as cyclical changes in the business risk environment affect information acquisition and consequent audit pricing behavior.

Morrison, Gwendolyn C.

PD November 1996. **TI** Willingness to Pay and Willingness to Accept: Some Evidence of an Endowment Effect. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9646; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 10. **PR** no charge. **JE** D10, D60. **KW** Willingness to Pay. Willingness to Accept.
AB The source the disparity between willingness to pay (WTP) and willingness to accept (WTA) measures of value has been the subject of recent debate in the literature. This paper presents the results of a pilot experiment designed to test whether, contrary to the findings of Shogren, Shin, Hayes, and Kliebenstein (1994), the endowment effect might be a significant source of the WTP/WTA divergence. The results are a direct contradiction of what the substitutability argument would predict and, thus, indicate that the endowment effect cannot yet be dismissed as a possible driving force behind the disparity.

Moscarini, Giuseppe

PD November 1996. **TI** Social Learning in a Changing World. **AU** Moscarini, Giuseppe; Ottaviani, Marco; Smith, Lones. **AA** Moscarini: Yale University. Ottaviani: University College London. Smith: Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 96/34; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 11. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** D83. **KW** Herding. Learning. Information Depreciation.
AB In the social learning model of Banerjee (1992) and Bikhchandani, Hirshleifer and Welch (1992), individuals take actions sequentially after observing the history of actions taken by the predecessors and an informative private signal. If the state of the world is changing stochastically over time during the learning process, only temporary informational cascades -- situations where socially valuable information is wasted -- can arise. Furthermore, no cascade ever arises when the environment changes in a sufficiently unpredictable way.

Moschetti, G. P. Philip

PD June 1996. **TI** Public Information and Trading Volume: Does Trading Generate Trading? **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9629; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 33. **PR** no charge. **JE** G14. **KW** Information. Trading Volume. Trading Volatility. Granger Causality. Market Efficiency.
AB This paper tests the assumption of one-way influence from information to trading volume. This assumption is basic to the idea that a variation in the amount of information flowing to the market affects the trading volume. The results from this research do not seem to support the traditional theory from many points of view: (i) the length of the influence of information on trading is larger than one might suppose; (ii) the

type of information that proves to be most influential is that generated inside the market; (iii) trading volume proves to have a considerable influence on information. The overall evidence suggests that information might be considered a "risk factor" but not "the cause" of trading. According to our results trading results to be mainly self- generated.

Moselle, Boaz

TI Hedging and Gambling: Corporate Risk Choice When Informing the Market. **AU** Degeorge, Francois; Moselle, Boaz; Zeckhauser, Richard.

Moulin, Herve

PD May 1995. **TI** Two Versions of the Tragedy of the Commons. **AU** Moulin, Herve; Watts, Alison. **AA** Moulin: Duke University. Watts: Vanderbilt University. **SR** Duke University, Department of Economics, Working Paper: 95/04; available only on web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 28. **PR** no charge. **JE** C72, D24. **KW** Commons. Production Process.

AB The commons are a one input-one output production process with increasing marginal cost. In the average return game, each agent chooses his input contribution and total output is shared in proportion to individual contributions. In the average cost game, each agent chooses his output share and total input cost is shared in proportion to individual demands. The tragedy is that the non cooperative equilibrium results in inefficient overutilization of the technology. We prove formally the tragedy when individual preferences are convex and both goods are normal. This result has not been proved previously on such a general preference domain. We also show that overutilization is less severe in the average cost game than in the average return game.

Mountford, Andrew

PD July 1996. **TI** Gradual Convergence Under Perfect International Capital Mobility. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9633; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 18. **PR** no charge. **JE** F40, O40. **KW** Convergence. International Capital. Overlapping Generations.

AB This paper demonstrates that the empirically observed gradual convergence of countries' per capita GDP can be straightforwardly modeled in a world economy with perfect capital mobility when land is a factor of production whose property rights are freely traded. This model can also show how an increase in the degree of international capital mobility can produce "catching up and overtaking" dynamics.

PD October 1996. **TI** Poverty Trap Equilibria in an Open International Environment. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9644; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 20. **PR** no charge. **JE** F11, F43, O40. **KW** Convergence. Poverty Traps. International Trade.

AB This paper uses a dynamic specific factors model to show how poverty trap equilibria can exist in a convex dynamic rational expectations general equilibrium model, under conditions of free trade and perfect capital mobility. It thus provides a justification for growth strategies based on temporary government measures to boost the value of a relevant state variable such as the level of human capital accumulation in an economy.

Mukerji, Sujoy

PD October 1996. **TI** Is Common Knowledge Possible in Games with Knightian Uncertainty? **AU** Mukerji, Sujoy; Shin, Hyun Song. **AA** Mukerji: University of Southampton. Shin: Nuffield College. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9642; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 16. **PR** no charge. **JE** C72, C79, D81. **KW** Choquet Integral. Common Belief. Common Knowledge. Knightian Uncertainty. Non-Additive Probabilities.

AB In a game where the players have non-additive beliefs, we argue that the game cannot be common knowledge among the players. Our argument revolves around a representation theorem which relates equilibrium under non-additive beliefs to equilibrium actions of a set of types in a Bayesian game with a common prior. Among these types, the games is common p-belief, where the p depends on the degree of uncertainty aversion. Only when the beliefs are additive is p = 1.

Mullin, Wallace

TI The Sugar Institute Learns to Organize Information Exchange. **AU** Genesove, David; Mullin, Wallace.

Munisamy, Gopinath

PD September 1995. **TI** Sources of Sectoral Growth in an Economy Wide Context: The Case of U.S. Agriculture. **AU** Munisamy, Gopinath; Roe, Terry L. **AA** University of Minnesota. **SR** University of Minnesota Economic Development Center Bulletin: 95/07; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 29. **PR** no charge. **JE** O13, O30, Q11. **KW** Growth. General Equilibrium. Agriculture. Technological Change.

AB Growth in U.S. agriculture is linked to the non-farm economy through domestic terms of trade and factor market adjustments. With almost stable input growth, the relatively large contributions from growth in Total Factor Productivity (TFP) are off-set by declining real prices of primary farm products. The resulting net growth in value of farm output, at 0.25 percent per annum, implies that the gains in TFP are shared by intermediate and final consumers of farm products. The decomposition of TFP suggests that public agricultural stock of knowledge and infrastructure are "robustly" associated with TFP growth, while spillovers from private agricultural and economy wide Research and Development (R&D) are positive but, relatively small.

PD September 1995. **TI** General Equilibrium Analysis of Supply and Factor Returns in U.S. Agriculture, 1949-91. **AU** Munisamy, Gopinath; Roe, Terry L. **AA** University of Minnesota. **SR** University of Minnesota Economic Development Center Bulletin: 95/08; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 29. **PR** no charge. **JE** O13, O30, Q11.

KW General Equilibrium. Supply. Factor Returns. Competitiveness.
AB General equilibrium -- open economy trade theory and time series data on the U.S. agricultural sector are used to provide insights into the structure of agricultural supply, factor returns and linkages to the rest of the economy. Output expansion and changes in factor rental rates depend on relative factor intensities. Theoretically consistent price elasticities of supply and factor rental rates are also obtained. The effect of the rest of the economy, particularly the increase in price services, is found to have relatively large negative impacts on agriculture. The static effects on growth of supply and factor rental rates tend to be dominated by rate effects which are shown to have strong positive effects on returns to family labor.

Murphy, Kevin M.

TI Wage Inequality and Family Labor Supply. **AU** Juhn, Chinhui; Murphy, Kevin M.

Neary, J. Peter

PD February 1997. **TI** True Multilateral Indexes for International Comparisons of Purchasing Power and Real Income. **AA** University College Dublin and London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 329; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 29. **PR** no charge. **JE** C80, D10, F11. **KW** International Comparisons. Exchange Rates. Purchasing Power. Geary Method.
AB I consider the problem of choosing index numbers of purchasing power and real income for international comparisons. I show that the desirable properties of methods based on the Fisher "Ideal" index do not extend to multilateral comparisons, except when tastes are homothetic. By contrast, the Geary method, which underlies the Penn World Tables, provides an approximation to a set of "true" exchange rate indexes which have many desirable properties. In particular, if demands exhibit generalized linearity, the true indexes measure real incomes relative to a hypothetical country whose income is an appropriate average of individual countries' incomes.

Nechyba, Thomas J.

PD January 1996. **TI** Local Party and State Income Taxes: The Role of Interjurisdictional Competition and Collusion. **AA** Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5419; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** $5.00. **JE** H77, H71, D63, D58. **KW** Property Taxes. Local Government. Political Economy. Public Choice.
AB This paper attempts to address two long standing positive questions in Public Finance: (i) why is the property tax, despite widespread popular complaints against its fairness, the almost exclusive tax instrument used by local governments, and (ii) why do the authors consistently observe attempts of governments (states) to undermine local property tax systems through income tax funded grants and state imposed caps on local property tax rates. A new intuitive argument to explain (i) is presented and tested in general equilibrium simulations. These simulations utilize a computable general equilibrium model. Different types of agents are endowed with income and houses and are able to move to their most preferred house in their most preferred jurisdiction. Furthermore, agents vote myopically on local property tax rates (and local public good levels), while non-myopic community planners set a local income tax. Six possible objective functions for community planners all lead to the same equilibrium outcome: community planners will always set local income tax rates at or close to zero. When faced with popular sentiment against the property tax, community planners can collude and introduce local income taxes simultaneously to prevent adverse general equilibrium migration and price changes. Since zero income tax rates are dominant strategies, however, such an agreement is only enforceable if an outsider such as the state government steps in.

PD January 1996. **TI** A Computable General Equilibrium Model of Intergovernmental Aid. **AA** Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5420; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** $5.00. **JE** H77, H71, D58, D72. **KW** New Jersey. Intergovernmental Relations. Political Economy. Public Choice.
AB This paper introduces a computable general equilibrium model of intergovernmental relations in which heterogeneous agents (i) are endowed with income and houses, (ii) are fully mobile between multiple jurisdictions, and (iii) vote in both local and state elections to determine local property and state income tax rates. The model is calibrated to New Jersey micro tax data and used to study the general equilibrium effects of state government policies. Three different types of intergovernmental programs are analyzed: (i) redistributive revenue sharing, (ii) district power equalization and (iii) deductibility of local taxes. The approach facilitates a heretofore difficult comparative analysis in that it provides for an integrated investigation of these programs in a single general equilibrium model.

PD January 1996. **TI** Existence of Equilibrium and Stratification in Local and Hierarchical Tiebout Economies with Property Taxes and Voting. **AA** Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 190; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** D50, H24, H70, R13. **KW** Public Goods. Property Taxes. Tiebout Economies. Voting. Income Tax.
AB We present the first fully closed general equilibrium model of hierarchical and local public goods economies with the following features: (i) multiple agent types who are endowed with both some amount of private good (income) and a house, who are mobile between houses and jurisdictions, and who vote in local and national elections; (ii) multiple communities that finance a local public good through property taxes which are set in accordance with absolute majority rule; and (iii) a national government that produces a national public good financed through an income tax level is determined through majority rule voting. In contrast to previous models, no overly restrictive assumptions on preferences and technologies are required to prove the existence of an equilibrium in the presence of property taxation and voting. Thus, the existence of an equilibrium is proved without any of the major restrictions used in the past, and sufficient conditions for stratification of agents into communities based on their

public good preferences and their wealth levels are found. This model lays the groundwork for a positive applied analysis of local public finance and intergovernmental relations.

Neely, Christopher J.

PD August 1994. **TI** Realignments of Target Zone Exchange Rate Systems: What Do We Know? **AA** Federal Reserve Bank of St. Louis. **SR** Federal Reserve Bank of St. Louis Working Paper: 94/020B; Research Division, Working Papers, Federal Reserve Bank of St. Louis, P.O. Box 442, St. Louis, MO 63166. Website: www.stls.frb.org. **PG** 38. **PR** no charge. **JE** F33, F47. **KW** Target Zone. Realignment. Speculative Attack. European Monetary System.

AB This article surveys recent work on forecasting realignments and estimating the credibility of target zones. The literature finds that realignments are somewhat predictable from readily available information such as interest rates and position of the exchange rate within the band. The relationship between realignment expectations and macrovariables is weak and uncertain. Realignments are said to "surprise" policy makers and market participants; they can only be predicted a short time before they happen. Further work on the formation of expectations would be an important contribution to future research in this area. Additionally, the role of the U.S. dollar in ERM realignments is often noted but has not yet been incorporated into the estimation techniques.

Neidert, Lisa J.

TI On the Validity of Using Census Geocode Characteristics to Proxy Individual Socioeconomic Characteristics. **AU** Geronimus, Arline T.; Bound, John; Neidert, Lisa J.

Neumann, George

TI Fitting Equilibrium Search Models to Labor Market Data. **AU** Bowlus, Audra J.; Kiefer, Nicholas; Neumann, George.

Newman, Andrew

TI The Labor Market and Corporate Structure. **AU** Acemoglu, Daron; Newman, Andrew.

Nickell, Stephen

PD October 1996. **TI** What Makes Firms Perform Well? **AU** Nickell, Stephen; Nicolitsas, Daphne; Dryden, Neil. **AA** Nickell: Institute of Economics and Statistics, Oxford. Nicolitisas and Dryden: Nuffield College, Oxford. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 308; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 23. **PR** no charge. **JE** G30, L20. **KW** Firms. Performance. Corporate Governance. Competition. Debt.

AB In this paper, we investigate the role of three external factors in generating improved productivity performance in companies. These are product market competition, financial market pressure and shareholder control. We have found, using data from around 580 UK manufacturing companies, that all three of these are associated with some degree of increased productivity growth. More specifically, average rents normalized on value-added (an inverse measure of competition) are negatively related to (total factor) productivity growth, interest payments normalized on cash flow are positively related to future productivity growth and firms with a dominant external shareholder from the financial sector have higher productivity growth rates. Furthermore, there is some evidence to suggest that the last two factors can substitute for competition.

PD October 1996. **TI** Does Innovation Encourage Investment in Fixed Capital? **AU** Nickell, Stephen; Nicolitsas, Daphne. **AA** Nickell: Institute of Economics and Statistics, Oxford. Nicolitsas: Nuffield College, Oxford. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 309; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 19. **PR** no charge. **JE** E22, O32. **KW** Innovation. Investment. Capital.

AB This paper presents an empirical investigation of the hypothesis that increased R&D expenditure by companies generates a subsequent increase in fixed capital investment both within the same companies and in the companies which they supply. We use an investment framework which involves modeling explicitly the expected present value returns to a marginal increment in the capital stock. This framework is directly suited to our purpose unlike the more standard Euler equation or Q models common in the literature. Our results indicate that R&D expenditure does indeed encourage investment in most industries and that there are no positive effects in the other direction. We have thus uncovered a part of the investment process but a more complete understanding awaits an improvement in our knowledge of the determinants of R&D.

Nicolitsas, Daphne

TI What Makes Firms Perform Well? **AU** Nickell, Stephen; Nicolitsas, Daphne; Dryden, Neil.

TI Does Innovation Encourage Investment in Fixed Capital? **AU** Nickell, Stephen; Nicolitsas, Daphne.

Nied, Angelika

TI The Demand for Alcohol in the United Kingdom. **AU** Blake, David; Nied, Angelika.

Nott, Loretta

PD September 1996. **TI** Hysteresis in the Canadian Labour Market: Evidence from the 1990's. **AA** Queen's University. **SR** University of Western Ontario Department of Economics Research Reports: RR/9605; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. **PG** 19. **PR** $10.00. **JE** E24. **KW** Unemployment. Hysteresis. Phillips Curve.

AB Given persistently high unemployment rates following the 1991/92 recession, the question of hysteresis in the Canadian economy has, once again, come to the forefront of academic and policy debate. This paper addresses two questions. First, does the inclusion of the 1991/92 recession and the years following, strengthen the evidence for hysteresis found by Fortin (1991)? Second, does the presumption of a linear Phillips curve, if indeed the function is non-linear, bias previous inferences made about hysteresis? My investigation reveals that updating Fortin's study weakens the hysteresis evidence, despite the pattern of persistently high unemployment rates and stable inflation in the early 1990's. And, while I do find evidence supporting a non-linear Phillips curve using the output gap, this does not change previous findings of no hysteresis.

Novaes, Walter

PD December 1995. **TI** Capital Structure Choice When Managers are in Control: Entrenchment Versus Efficiency. **AU** Novaes, Walter; Zingales, Luigi. **AA** Novaes: University of Washington. Zingales: University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5384; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 34. **PR** $5.00. **JE** G32, G34, D23. **KW** Agency Problem. Management. Equity. Debt. Ownership.

AB Recent capital structure theories have emphasized the role of debt in minimizing the agency costs that arise from the separation between ownership and control. In this paper the authors argue that capital structure choices themselves are affected by the same agency problem. The authors show that, in general, shareholders' and the manager's capital structure choices differ not only in their levels, but also in their sensitivities to the cost of financial distress and taxes. The authors argue that only the managerial perspective can explain why firms are generally reluctant to issue equity, why they issue it only following a stock price run-up, and why Corporate America recently deleveraged under the same tax system that supposedly generated the increase in leverage in the 1980's.

O'Brien, R. J.

PD August 1996. **TI** The Curious Case of "Spurious" Cointegration. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9638; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 11. **PR** no charge. **JE** C40, C52. **KW** Cointegration Tests. Spurious Cointegration. Structural Breaks. Innovation Outlier.

AB It is well-known that intercept shifts, or "step dummies", in stationary processes can make such processes appear as integrated of order 1, I(1). This paper examines the effect of step dummies in I(1) processes upon Johansen's cointegration tests. The step dummy enters the I(1) process as an innovation outlier. It is shown that, in the case where the statistical model used for testing fails to take into account one or more such step dummies, unrelated random walks will appear cointegrated with probability 1 as the sample size tends to infinity. A preliminary Monte Carlo study suggests the effects are of importance in samples of moderate size.

O'Regan, James

TI Australian Financial Market Volatility: An Exploration of Cross- Country and Cross-Market Linkages. **AU** Kortian, Tro; O'Regan, James.

O'Rourke, Kevin H.

PD December 1995. **TI** Around the European Periphery 1870-1913: Globalization, Schooling and Growth. **AU** O'Rourke, Kevin H.; Williamson, Jeffrey G. **AA** O'Rourke: University College. Williamson: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5392; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 44. **PR** $5.00. **JE** F02, D31, O47. **KW** Globalization. Inequality. Europe. Industrialization. Technology. Growth.

AB On average, the poor European Periphery converged on the rich industrial core in the four or five decades prior to World War I. Some, like the three Scandinavian economies, used industrialization to achieve a spectacular convergence on the leaders, especially in real wages and living standards. Some, like Ireland, seemed to do it without industrialization. Some, like Italy, underwent less spectacular catch- up, and it was limited to the industrializing North. Some, like Iberia, actually fell back. What accounts for this variety? What role did trade and tariff policy play? What about emigration and capital flows? What about schooling? The authors offer a tentative assessment of these contending explanations and conclude that globalization was by far the dominant force accounting for convergence (and divergence) around the periphery. Some exploited it well, and some badly.

Ohanian, Lee E.

TI Dynamic Equilibrium Economies: A Framework for Comparing Models and Data. **AU** Diebold, Francis X.; Ohanian, Lee E.; Berkowitz, Jeremy.

Ottaviani, Marco

TI Social Learning in a Changing World. **AU** Moscarini, Giuseppe; Ottaviani, Marco; Smith, Lones.

Ottaviano, Gianmarco I. P.

TI Growing Locations: Industry Location in a Model of Endogenous Growth. **AU** Martin, Philippe; Ottaviano, Gianmarco I. P.

TI Growth and Agglomeration. **AU** Martin, Philippe; Ottaviano, Gianmarco I. P.

Paczuski, M.

TI Price Variations in a Stock Market with Many Agents. **AU** Bak, P.; Paczuski, M.; Shubik, M.

Pagan, Adrian

TI Towards a Structural VAR Model of the Australian Economy. **AU** Dungey, Mardi; Pagan, Adrian.

Pakes, Ariel

PD December 1996. **TI** Stochastic Algorithms for Dynamic Models: Markov Perfect Equilibrium, and the 'Curse' of Dimensionality. **AU** Pakes, Ariel; McGuire, Paul. **AA** Pakes: Yale University and National Bureau of Economic Research. McGuire: Yale University and EGC. **SR** Yale Cowles Foundation Discussion Paper: 1144; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 48. **PR** no charge. **JE** C63, C73, D43, L13. **KW** Computational Algorithms. Curse of Dimensionality. Markov Perfect Equilibrium.

AB This paper provides an algorithm for computing policies for dynamic economic models whose state vectors evolve as ergodic Markov processes. The algorithm can be described as a simple learning process. It has two features which break the relationship between its computational requirements and the dimension of the model's state space. First the integral over future states needed to determine policies is never calculated; rather it is estimated by a simple average of past outcomes.

Second, the algorithm never computes policies at all points. Iterations are defined by a location and only policies at that location are computed. Random draws from the distribution determined by those policies determine the next location. This selection only repeatedly hits the recurrent class of points, a subset of the feasible set whose cardinality is not directly tied to the dimension of the state space. Our motivating example is Markov Perfect Equilibria. Though estimators for the primitive parameters of these models are often available, computational problems have made it difficult to use them in applied analysis. We provide numerical results which show that our algorithm can be several orders of magnitude faster than standard algorithms in this case; opening up new possibilities for applied work.

Pakko, Michael R.

PD May 1994. **TI** Reconciling Low Cross-Country Consumption Correlations with International Risk Sharing. **AA** Federal Reserve Bank of St. Louis. **SR** Federal Reserve Bank of St. Louis Working Paper: 94/019A; Research Division, Working Papers, Federal Reserve Bank of St. Louis, P.O. Box 442, St. Louis, MO 63166. Website: www.stls.frb.org. **PG** 30. **PR** no charge. **JE** F11, F41, G15. **KW** Assets. Complete Markets. Consumption. Trade Dynamics. Risk Aversion. Risk Pooling.

AB In equilibrium models of trade dynamics, it is often assumed that financial markets are complete in the Arrow-Debreu sense. A common implication of this assumption is that the correlations of aggregate consumption across countries should be quite high. In contrast, measured cross-country consumption correlations tend to be rather low. Some have suggested that this discrepancy implies that a model with incomplete asset markets might be required to realistically account for international fluctuations. This paper provides a simple example in which complete markets can be associated with very low consumption correlations. From a two-country, two-good endowment-exchange model, I derive conditions under which the implied cross-country consumption correlation is lower than the corresponding correlation of outputs. These conditions can be characterized as requiring that the elasticity of substitution between domestic goods and imports be sufficiently low relative to the intertemporal or interstate elasticity of substitution.

Palfrey, Thomas R.

TI Interim Efficiency in a Public Goods Problem. **AU** Ledyard, John O.; Palfrey, Thomas R.

Patel, Urgit R.

PD January 1997. **TI** The Real Exchange Rate in India: Determinants and Targeting. **AU** Patel, Urgit R.; Srivastava, Pradeep. **AA** Patel: Reserve Bank of India and International Monetary Fund. Srivastava: The World Bank. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 323; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 28. **PR** no charge. **JE** F41. **KW** Real Exchange Rate. India. Exchange Rate Targeting.

AB The paper studies the behavior of the real exchange rate (RER) in India. The first part investigates the role of important macroeconomic (behavioral and policy) variables in explaining the movement of the RER. It is found that the investment-GDP ratio, the overall fiscal deficit of the public sector and the nominal exchange rate are important explanatory variables. The second part of the paper seeks to determine whether real exchange rate targeting has been used in India as a tool in enhancing the competitiveness of the tradable sector. It is found that this is indeed the case, and moreover, the correlation between inflation and nominal devaluations is found to be small.

PD February 1997. **TI** International Trade and Internal Organisation. **AA** Reserve Bank of India and International Monetary Fund. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 328; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 27. **PR** no charge. **JE** F11. **KW** Internal Organization. Polyarchy. Hierarchy. Comparative Advantage.

AB This paper integrates theories of organization with a model of international trade. We add another dimension -- how decisions regarding which ideas or projects to accept are made -- to the standard trade framework. It is shown that asymmetry in the organization of economies per se can be a source of comparative advantage and two-way trade. The framework in the paper is flexible enough to be incorporated in most international trade models (irrespective of market structure).

Pauna, Catalin

TI Labour Market Policy and the Reallocation of Labour Across Sectors. **AU** Jackman, Richard; Pauna, Catalin.

Payne, Richard

TI One Day in June, 1993: A Study of the Working of Reuters 2000-2 Electronic Foreign Exchange Trading System. **AU** Goodhart, Charles; Ito, Takatoshi; Payne, Richard.

Peled, Dan

TI Growth Effects of Subsidies in a Search Theoretic R&D Model: A Quantitative Evaluation. **AU** Bental, Benjamin; Peled, Dan.

Perretto, Pietro F.

PD September 1995. **TI** Variety, Spillovers and Market Structure in a Model of Endogenous Technological Change. **AA** Duke University. **SR** Duke University, Department of Economics, Working Paper: 95/06; available only on web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 28. **PR** no charge. **JE** E10, L16, O31, O40. **KW** Growth. Market Structure. Product Variety. Spillovers. Endogenous Technological Change.

AB I study an economy where oligopolistic firms establish in-house R&D programs to produce a continuous flow of cost-reducing (incremental) innovations. The scale of firms' R&D operations determines the rate of productivity growth. I first study the role of concentration, firm size, and demand, appropriability, and opportunity conditions, when the number of firms is exogenous. I find hump-shaped relationships of knowledge appropriability and the number of firms with steady-state growth that give a first intuition about the forces at work in the model. Next, I let the number of firms be endogenous and study the balanced-growth path of the economy in two dimensions: productivity growth and the number (variety) of goods. The price, investment, entry, and exit decisions are interdependent. In particular, R&D is a fixed (sunk) cost and in zero- profit equilibrium is negatively related to the number of firms. This additional feed-back reinforces the market fragmentation effect. More importantly, many parameters have no longer the effects predicted by the model with an exogenous number of firms (and the standard models in the literature).

Perry, Motty

PD October 1996. **TI** The Optimal Timing of Procurement Decisions and Patent Allocations. **AU** Perry, Motty; Vincent, Daniel R. **AA** Perry: Hebrew University and University of Western Ontario. Vincent: University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Report: RR/9611; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. **PG** 26. **PR** $10.00. **JE** O32. **KW** Research and Development.

AB We illustrate by means of a dynamic research and development race that, while at some points in the race, social incentives and private incentives may coincide, at other points they may diverge -- too many researchers remain in the race. If the social planner cannot determine what stage the researchers have achieved, this informational constraint poses difficulties in ensuring a socially optimal outcome. We show that there is a mechanism which allows the planner to exploit the researchers' private information to determine when and to whom to allocate the exclusive rights to pursue the final prize. This mechanism does not require any transfer of resources and, therefore, will not distort earlier incentives to invest. Furthermore, it is solvable by the iterative elimination of dominated strategies.

Persson, Lars

PD December 1996. **TI** Endogenous Mergers in Concentrated Markets. **AU** Persson, Lars; Horn, Henrik. **AA** Persson: Stockholms Universiteit. Horn: World Trade Organization. **SR** Centre for Economic Policy Research Discussion Paper: 1544; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 33. **PR** 4 pounds or $8.00. **JE** G34, L13, L41. **KW** Endogenous Mergers. Coalition Formation.

AB The merger literature almost exclusively considers mergers between exogenously specified firms. This paper proposes an approach to predict the pattern of mergers in situations where different mergers are feasible. It generalizes the traditional industrial organization approach, employing ideas on coalition-formation from cooperative game theory. The model suggests that in concentrated markets, equilibrium mergers are conducive to market structures with large industry profits, thus pointing to an inherent conflict between private and socially- correct merger incentives. While applying the model, light is also thrown on formation of research joint ventures, mergers between quantity-constrained firms, and tariff-jumping foreign direct investment.

Pesenti, Paolo

TI Interpreting the ERM Crisis: Country-Specific and Systemic Issues. **AU** Buiter, Willem H.; Corsetti, Giancarlo; Pesenti, Paolo.

Petersen, Bruce C.

TI Financing Constraints and Corporate Investment: Response to Kaplan and Zingales. **AU** Fazzari, Steven M.; Hubbard, R. Glenn; Petersen, Bruce C.

Petrongolo, Barbara

TI Skill Mismatch and Unemployment in OECD Countries.
AU Manacorda, Marco; Petrongolo, Barbara.

Phillips, Peter C. B.

PD September 1996. **TI** Efficiency Gains from Quasi-Differencing Under Nonstationarity. **AU** Phillips, Peter C. B.; Lee, Chin-Chin. **AA** Phillips: Yale University. Lee: London School of Economics. **SR** Yale Cowles Foundation Discussion Paper: 1134; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 24. **PR** no charge. **JE** C22. **KW** Asymptotic Efficiency. Detrending. Near Integration. Quasi- Differencing.

AB A famous theorem on trend removal by OLS regression (usually attributed to Grenander and Rosenblatt (1957)) gave conditions for the asymptotic equivalence of GLS and OLS in deterministic trend extraction. When a time series has trend components that are stochastically nonstationary, this asymptotic equivalence no longer holds. We consider models with integrated and near-integrated error processes where this asymptotic equivalence breaks down. In such models, the advantages of GLS can be achieved through quasi-differencing and we give an asymptotic theory of the relative gains that occur in deterministic trend extraction in such cases. Some differences between models with and without intercepts are explored.

PD October 1996. **TI** Spurious Regression Unmasked. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1135; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 35. **PR** no charge. **JE** C22. **KW** Fourier Series. Mercer's Theorem. Spurious Regression. Weierstrass Theorem.

AB This paper argues that trending time series can admit valid regression representations even when the dependent variable and the regressors are statistically independent, i.e. in situations that are presently characterized in the literature as "spurious regressions." Our theory is directed mainly at the two classic examples of regressions of stochastic trends on time polynomials and regressions among independent random walks. But it has more general applicability and, we think, wider implications. Contrary to established wisdom, our theory justifies regressions of this type as valid models for the data. The radical conclusion that emerges from this study is that there are no spurious regressions for trending time series, just alternative valid representations of the limiting dependent variable process in terms of other stochastic processes and deterministic functions of time. We find statistical inference in such cases to be valid, not spurious, a conclusion that is in direct contrast to universal thinking about this subject since Yule (1926) first wrote about nonsense correlations.

TI Bayesian Posterior Distributions in Limited Information Analysis of the Simultaneous Equations Model Using the Jeffreys' Prior. **AU** Chao, John C.; Phillips, Peter C. B.

Piermartini, Roberta

PD August 1996. **TI** Trade Liberalisation and Innovative Success with Unionised Labour Markets. **AU** Piermartini, Roberta; Ulph, Alistair. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9637; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website:

www.soton.ac.uk/discp.html. **PG** 26. **PR** no charge. **JE** F15, J51, O14, O30. **KW** Research and Development. Innovation. Trade Unions. Integration.

AB We investigate the effects of trade liberalization on the incentive for firms to innovate where there are unionized labor markets. We consider a two-sector and two-country model where firms compete in both the product market and research and development. Research and development competition is modeled as a patent race. Wages are set by utilitarian monopoly unions organized at the firm, national or international level. We find that unionization adversely affects firms' incentive to innovate. This effect differs with the extent of wage bargaining centralization and is less for national-level unions. Liberalization principally boosts innovation when labor markets are competitive and favors action reaction in patent races.

Pierret, Charles R.

TI Employer Learning and the Signaling Value of Education. **AU** Altonji, Joseph G.; Pierret, Charles R.

Pischke, Jorn-Steffen

PD October 1996. **TI** Continuous Training in Germany. **AA** Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 96/28; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 40. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** J24, J31. **KW** On-the-Job Training. Human Capital. Return to Training.

AB Using data from the German Socio-Economic Panel I describe 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. It is concentrated among the more highly educated, in the service sector and in public administration. Much of this training seems to be general and provided to workers by their employer at no direct cost. On the other hand, the training also does not seem to result in noticeable wage gains, especially for men. These results are somewhat at odds with the conventional models about the financing of human capital formation.

Pitchford, Rohan

PD August 1996. **TI** Property Rights and Incomplete Contracts: Dealing with Nuisance. **AU** Pitchford, Rohan; Snyder, Christopher M. **AA** Pitchford: Centre for Economic Policy Research and Australian National University. Snyder: George Washington University. **SR** Australian National University Working Paper in Economics and Econometrics: 308; Department of Economics, The Faculties, Australian National University, Canberra ACT 0200, Australia. **PG** 27. **PR** no charge. **JE** C78, D23, H23, K11. **KW** Externalities. Incomplete Contracts. Location. Property Rights.

AB A model of externalities with sequential location choice is developed. The first mover decides on location before it knows the identity of the second mover. Joint location results in a negative externality. The court, having limited information, allocates property rights over the externality based on the timing of location. Sufficient conditions are presented supporting the "coming to the nuisance" doctrine, where the first mover is given property rights. This doctrine is not always supported: greater surplus may be generated by giving property rights to the second mover. A sufficient condition guaranteeing optimality for any property-rights allocation is derived.

Plott, Charles R.

PD May 1996. **TI** Laboratory Experimental Testbeds: Applications to the PCS Auction. **AA** California Institute of Technology. **SR** Caltech Social Science Working Paper: 957; Division of the Humanities and Social Sciences, MC 228-77, California Institute of Technology, Pasadena, CA 91125. Website: www.hss.caltech.edu/SSWP.htm/. **PG** 21. **PR** no charge. **JE** C90, D44, L96. **KW** Experimental Methods. Personal Communication Systems.

AB The use of laboratory experimental methods in economics has been growing rapidly. With each application, new insights are gained about how the methodology can be used to supplement the more traditional forms of research. Such was the case with the development of the Federal Communications Commission (FCC) policy for the auction of licenses for Personal Communications Systems (PCS). At several different stages the laboratory experimental methods of economics were used. The application differed at each of these stages, representing the different types of relationships that can exist among theory, observation, and policy. This paper is a brief account of the applications.

Polemarchakis, H. M.

TI Exchange and Optimality. **AU** Ghosal, S.; Polemarchakis, H. M.

PD October 1996. **TI** Prices, Asset Markets and Indeterminacy. **AU** Polemarchakis, H. M.; Siconolfi, P. **AA** Polemarchakis: Universite Catholique de Louvain and Yale University. Siconolfi: Columbia University. **SR** Yale Cowles Foundation Discussion Paper: 1136; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 17. **PR** no charge. **JE** D52. **KW** Incomplete Asset Market. Trading Constraints. Indeterminacy.

AB Competitive equilibrium allocations are indeterminate when the net trades in commodities are constrained, while the asset market is incomplete.

TI Asset Markets and Investment Decisions. **AU** De Waegenaere, A.; Polemarchakis, H. M.; Ventura, L.

Poterba, James M.

PD February 1996. **TI** Budget Institutions and Fiscal Policy in the U.S. States. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5449; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 12. **PR** $5.00. **JE** H61, H63, H74. **KW** Balanced Budget. States. Deficit. Enforcement.

AB This paper summarizes state balanced budget requirements, and the available empirical evidence on the effect of these rules on state fiscal policies. Existing state rules differ from many current proposals at the federal level. They are typically restricted to part of the state budget, they frequently permit short term borrowing, and they lack formal enforcement mechanisms. The paper also surveys previous research on how anti-deficit provisions affect state fiscal policy. The available evidence indicates that stringent anti-deficit provisions lead to more rapid adjustment of state taxes and expenditures when fiscal deficits emerge. This suggests that changing the federal budget process has the potential to affect federal fiscal policy.

Prendergast, Renee

TI Competition and Competitive Advantage. **AU** Michie, Jonathan; Prendergast, Renee.

Proske, Dieter

TI Are There Adverse Real Effects from Monetary Policy Coordination? Some Evidence from Austria, Belgium and the Netherlands. **AU** Tatom, John A.; Proske, Dieter.

Prusa, Thomas J.

PD January 1996. **TI** The Trade Effects of U.S. Antidumping Actions. **AA** Rutgers University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5440; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 18. **PR** $5.00. **JE** F13, F14, F42, D78. **KW** Political Economy. Dumping. Tariffs. Imports.

AB This paper presents evidence on the effectiveness of antidumping (AD) actions. Using a data set based on the line-item tariff codes identified in the cases, it examines the trade patterns of both countries named in the petition and those countries not subject to the investigation. Several important findings emerge. First, AD duties substantially restrict the volume of trade from named countries, especially for those cases with high duties. Second, AD actions that are rejected still have an important impact on named country trade, especially during the period of investigation. Third, there is substantial trade diversion from named to non-named countries and the diversion is greater the larger is the estimated duty. Because of the diversion of imports, the overall volume of trade continues to grow -- even for those cases which result in duties. Fourth, despite the diversion of imports, AD law still offers important benefits because it induces substantial import price increases both by named and non-named countries. Finally, because of the diversion of imports, aggressive use of AD law by U.S. firms has the peculiar side-effect of benefiting non-named countries who are active in the areas under investigation.

Pudney, Stephen

TI Semi-Parametric Estimation of the Company Growth-Size Relation. **AU** Cosh, Andy; Hughes, Alan; Lee, Hyehoon; Pudney, Stephen.

Puga, Diego

PD September 1996. **TI** Urbanisation Patterns: European versus Less Developed Countries. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 305; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 32. **PR** no charge. **JE** R11, R12, R23. **KW** Urbanization. Transportation Costs. Labor Migration.

AB We develop a model in which the interaction between transport costs, increasing returns, and labor migration across sectors and regions creates a tendency for urban agglomeration. Demand from rural areas favors urban dispersion. European urbanization took place mainly in the XIX century, with higher costs of spatial interaction, weaker economies of scale, and a less elastic supply of labor to the urban sector than in LDC's today. These factors, together with a bias in the transport networks of LDC's towards serving larger cities, could help explain why European countries have developed balanced urban systems while primate cities dominate in LDC's.

PD November 1996. **TI** The Rise and Fall of Regional Inequalities. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 314; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 42. **PR** no charge. **JE** R12, R23, R41. **KW** Regional Integration. Transportation Costs.

AB This paper analyzes how the degree of regional integration affects regional differences in production structures and income levels. With high transport costs, industry is spread across regions to meet final consumer demand. As transport costs fall, increasing returns interacting with labor mobility and/or input-output linkages between firms create a tendency for the agglomeration of increasing returns activities. When workers migrate towards locations with more firms and higher real wages, this intensifies agglomeration. When instead workers do not move across regions, further reductions in transport costs make firms increasingly sensitive to wage differentials, leading industry to spread out again.

PD December 1996. **TI** Trading Arrangements and Industrial Development. **AU** Puga, Diego; Venables, Anthony J. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 319; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 34. **PR** no charge. **JE** F13, O14. **KW** Trade. Liberalization.

AB This paper outlines a new approach for analyzing the role of trade in promoting industrial development. It offers an explanation as to why firms are reluctant to move to economies with lower labor costs, and shows how trade liberalization can change the incentives for firms to locate in developing countries. Unilaterally liberalizing imports of manufactures can promote industrialization, but membership of a preferential trading arrangement is likely to create larger gains. South-South PTA's will be sensitive to the market size of member states, while North-South PTA's seem to offer better prospects -- for participating Southern economies, if not for excluded countries.

Qin, Duo

PD July 1996. **TI** Dynamic Structure of Disequilibrium Models. **AU** Qin, Duo; Lu, Maozu. **AA** Qin: University of London. Lu: University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9631; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 16. **PR** no charge. **JE** C32, C50, D52, P21. **KW** Disequilibrium. Cointegration.

AB This paper investigates the dynamic structure of a standard disequilibrium model. By assuming that the model variables are non- stationary time series with respect to ample empirical evidence, we find the following: 1) It is the exogenous variables rather than the price adjustment process that form the real adjustment force of the model; 2) Quantity disequilibrium and price disequilibrium are isomeric in the model, and follow a weakly stationary process when all the variables are I(1) nonstationary; 3) The disequilibrium process has a non-zero mean when the weakly exogenous variables of the demand equation do not cointegrate with those of the supply equation, corresponding to certain "chronic disequilibrium" phenomena; 4) The isomerism between quantity disequilibrium and price changes makes it seemingly unnecessary to lean on the "min condition" to characterize disequilibrium.

Qizilbash, Mozaffar

PD July 1996. **TI** The Concept of Well-Being. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9634; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 26. **PR** no charge. **JE** I30, I31. **KW** Well-Being. Preference. Capability. Quality of Life.

AB This paper considers three views of the quality of life. These involve (1) desire satisfaction (2) capability and (3) prudential value theory. It is argued that views involving (1) do not provide plausible accounts of well-being unless they involve informed desires of first or second-order. However, human beings rarely have the capacities for knowledge or fellow-feeling that such views require. Capability views, on the other hand, fail either because (as in the case of Amartya Sen) they fail to give any importance to the means of freedom and negative freedom or (as in the case of Martha Nussbaum) because they fail to accommodate pluralism. I suggest that the best approach is a variation on the prudential value theory of James Griffin. This involves the idea of a list of values that make any human life go better. I suggest that it deals well with pluralism.

PD August 1996. **TI** Pluralism and Well-Being Indices. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9636; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 31. **PR** no charge. **JE** I30, I31. **KW** Well-Being. Quality of Life. Pluralism. Human Development Index. Borda Ranking.

AB This paper advocates a variation on James Griffin's prudential value theory of well-being. Prudential value theory is consistent with various forms of pluralism. It also helps us understand how we do intra- and interpersonal comparisons of well-being. If we start form this view of well-being, I suggest we do not have a problem analogous to Arrow's impossibility result for a social welfare function: the analogous conditions are not appropriate constraints on a well-being function. The account of well-being is brought to bear on attempts made by some (the UNDP and Dasgupta and Weale) to make international comparisons of well- being. It is argued that difficulties with such attempts occur chiefly because of disanalogies between interpersonal and international comparisons of well-being.

Quah, Danny

PD November 1996. **TI** Convergence as Distribution Dynamics (With or Without Growth). **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 317; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 32. **PR** no charge. **JE** C23, D30, E17, O57. **KW** Cross-Country Convergence. Distribution Dynamics. Divergence. Polarization. Stratification.

AB Convergence concerns the poor catching up with the rich -- if not instantaneously, then at least having a tendency to do so. When poor and rich here refer to entire economies, then whether convergence occurs is traditionally viewed as just a side consequence of a more central question, namely that concerning the nature of economic growth. This paper argues instead that convergence itself is of direct interest. When convergence is made central and thus investigated, new theoretical issues and empirical insights emerge: this paper provides a brief overview of what those lessons are, and conjectures what next might be learnt.

PD January 1997. **TI** Empirics for Growth and Distribution: Stratification, Polarization and Convergence Clubs. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 324; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 25. **PR** no charge. **JE** C13, C33, F43, O30. **KW** Convergence. Distribution Dynamics. Income Distribution. Twin Peaks.

AB This paper studies cross-country patterns of economic growth from the viewpoint of income distribution dynamics. Such a perspective raises new empirical and theoretical issues in growth analysis: the profound empirical regularity is an "emerging twin peaks" in the cross-sectional distribution, not simple patterns of convergence or divergence. The theoretical problems raised concern interaction patterns among sub-groups of economies, not only problems of a single economy's accumulating factor inputs and technology for growth.

Rajan, Raghuram G.

PD December 1995. **TI** The Tyranny of the Inefficient: An Enquiry Into the Adverse Consequences of Power Struggles. **AU** Rajan, Raghuram G.; Zingales, Luigi. **AA** University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5396; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 34. **PR** $5.00. **JE** C72, D23. **KW** Efficiency. Dynamic Games. Institutions.

AB Life is replete with instances where two closely related parties forego mutually advantageous opportunities: peace treaties are not signed, inefficient regulations are not altered, and possibilities for investment are frittered away. Since the parties are in close contact, asymmetric information cannot be an explanation for the failure to agree. The explanation this paper offers is based on the assumption that when two parties interact repeatedly, not all aspects of the relationship are contractible. Each party's property rights in the relationship then become endogenous. Efficiency and distribution are not separable in such a world, leading the parties to forego perfectly contractible opportunities. The inability to cooperate is especially severe when one of the parties has relatively poor production opportunities, which may explain why the inefficient have undue sway.

Ramstetter, Eric

TI Internationalized Production in World Output. **AU** Lipsey, Robert E.; Blomstrom, Magnus; Ramstetter, Eric.

Rausser, Gordon

PD January 1997. **TI** The Economic Value of Patents, Licenses, and Plant Variety Protection. **AU** Rausser, Gordon; Small, Arthur. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 797; 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** 16. **PR** 25 cents per page domestic; 50 cents per page foreign. **JE** O34. **KW** Patents. Licenses. Intellectual Property Rights.

AB While biotechnology creates new opportunities for agriculture, developments are impeded by confusion in the system for awarding intellectual property rights (IPR's) over agro-biotechnological innovations. An intelligent redesign of the IPR system requires attention to how the definition of rights interacts with the market environment, generating incentives to create value. A distinction is drawn between cost-reducing innovations that increase the efficiency of producing homogeneous outputs and value-adding innovations that create entirely new types of differentiated groups. A reform is proposed that would require the mandatory sublicensing of genes and certain core enabling technologies for creating genetically altered organisms.

PD January 1997. **TI** Alternative Trade and Support Strategies for CAP Integration. **AU** Rausser, Gordon; Small, Arthur. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 801; 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** 42. **PR** 25 cents per page domestic; 50 cents per page foreign. **JE** F14, Q18. **KW** Agricultural Policies. Alternative Trade. GATT. European Union. CAP Integration.

AB The prospect that the nations of Central and Eastern Europe may soon join the European Union (EU) raises a number of questions concerning the treatment of agriculture under the treaties of accession. In order to analyze the implications of alternative accession scenarios, we construct a simulation model of the agricultural economies in Eastern Europe and explore the consequences of various regimes of trade and support policies under different scenarios concerning the terms in the treaties of accession. The analysis focuses on the relationship between different negotiated accession contracts, pre-accession agricultural support policies, restructuring in the agricultural sector, and sectoral performance. The analysis suggests that the choice of transitional policies adopted during the pre-accession period are far more important in determining outcomes in the agricultural sector than are the terms of accession to the EU. The prevailing attention to convergence with EU norms may be misplaced, and perhaps even harmful.

Razin, Assaf

PD January 1996. **TI** Labor Mobility and Fiscal Coordination. **AU** Razin, Assaf; Yuen, Chi-Wa. **AA** Razin: International Monetary Fund and National Bureau of Economic Research. Yuen: University of Hong Kong. **SR** National Bureau of Economic Research Working Paper: 5433; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 22. **PR** $5.00. **JE** J61, D31, D62, I21, J24. **KW** Human Capital. Education. Growth. Europe. Externalities.

AB Using a human capital based growth model, the authors show the essential role of labor mobility and cross-country tax harmonization in equalizing income levels of countries that start off from different initial income positions. Knowledge spillovers cum labor mobility are the driving forces behind the income level equalization process. In the absence of tax harmonization within an economic union, equality in income levels is not achievable. Coordination of educational subsidies necessary for the internalization of knowledge spillovers may or may not be necessary. These considerations constitute the basis for our efficient growth agenda for an economic union such as the EU.

TI Sustainability of Persistent Current Account Deficits. **AU** Milesi-Ferretti, Gian Maria; Razin, Assaf.

Repetto, Andrea

PD July 1997. **TI** The Leontiev-Trefler Hypothesis and Factor Price Insensitivity. **AU** Repetto, Andrea; Ventura, Jaume. **AA** Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 97/13; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 35. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** F10, F41. **KW** Leontiev-Trefler Hypothesis. Factor Price Insensitivity.

AB This paper reports the results of a new test of the Leontiev-Trefler hypothesis that factor-augmenting international productivity differences explain most of the cross-country variation in factor prices. Our sample consists of four cross-sections of 16, 31, 51, and 50 countries for 1970, 1975, 1980, 1985, respectively. Our test rejects the Leontiev-Trefler hypothesis unless we restrict the sample to the European Union. While factor-augmenting productivity differences might be real and important, there is more in a cross-section of factor prices than them. The failure of the Leontiev-Trefler hypothesis does not mean however that factor prices are related to domestic factor endowments. As a by- product of the test, we are able to estimate productivity-adjusted wage- rental ratios for a panel of countries. We find that, in closed economies, the cross-country variation in these wage-rental ratios can be explained in part by factor endowment variables. In open economies these factor endowment variables have no explanatory power however. These findings suggest that we should develop models that: (1) feature the factor-price-insensitivity property emphasized by Leamer Levinsohn (1995); but (2) allow for determinants of the cross-section of factor prices other than the productivity differences emphasized by Trefler (1993).

Rey, Helene

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 A Portfolio Approach to a Cross-Sectoral and Cross-

National Investment Strategy in Transition Economies. **AU** Buiter, Willem H.; Lago, Ricardo; Rey, Helene.

PD February 1997. **TI** International Trade and Currency Exchange. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 322; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 26. **PR** no charge. **JE** F14, F31. **KW** Currency Exchange. Trade.

AB On the international scene, away from national legal rules, the use of different currencies is largely due to the process of the "Invisible Hand". How do currencies flow when their circulations are not tightly guided and canalized? The paper develops a three-country model of the world economy and links real trade patterns with currency exchange structures in a general equilibrium framework which includes transaction costs on foreign exchange markets. It is shown that there are in general multiple equilibrium structures of currency exchange for a given underlying real trade pattern. The existence conditions of these different equilibria are characterized, using the trade links between countries as the key parameters. An evolutionary approach to equilibrium selection is used to explain the rise and fall of international currencies as the trade flows between the three economies are altered. Finally, repercussions of the choice of a currency exchange structure on welfare are analyzed.

Rice, Patricia G.

PD September 1996. **TI** Further Education or the Job Queue? A Study of Choice of Activity by Young Persons Based on Evidence From the Youth Cohort Study. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9639; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 27. **PR** no charge. **JE** I28, J24. **KW** Education. Human Capital. Discrete Choice.

AB The paper focuses on the individual's choice of activity on completion of compulsory schooling -- to proceed to further education or to seek employment -- and the factors influencing this decision. Information from the England and Wales Youth Cohort Studies, coupled with labor market data, is used to estimate a logit in the decision. The results establish that, while educational and social background play a dominant role, labor market conditions are influential. The dearth of employment opportunities for young people have contributed significantly to the marked increase in participation rates in further education of recent years.

Richardson, James

PD February 1997. **TI** Can Active Labour Market Policy Work? Some Theoretical Considerations. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 331; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 28. **PR** no charge. **JE** E24, J28. **KW** Labor Markets. Unemployment. Employment Subsidies.

AB Persistent high unemployment in Europe has led to renewed interest in Active Labor Market Policy. However, most existing theory suggests that its effects are ambiguous at best. We argue that job search assistance and wage subsidies are more appropriately modeled as a transition rather than the state-based approach of existing theory. This eliminates the ambiguity. We present two main models, one in which negative duration dependence in unemployment arises from state dependence, the other where it is due to heterogeneity. In both cases policy is unambiguously effective provided it is targeted on those who are, or are most likely to become, long-term unemployed. Some crude estimates suggest that Active Labor Market Policies could have a significant, though not spectacular, effect in reducing unemployment.

Robertson, Donald

PD November 1996. **TI** Do Peer Groups Matter? Peer Group versus Schooling Effects on Academic Attainment. **AU** Robertson, Donald; Symons, Jim. **AA** Robertson: University of Cambridge and London School of Economics. Symons: University College London and London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 311; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 30. **PR** no charge. **JE** I20, J24. **KW** Education Production Function. Peer Groups.

AB In this paper we estimate an educational production function. Educational attainment is a function of three types of inputs: peer group, parental and schooling. We find that conventional measures of school quality are not good predictors for academic attainment, once we control for peer group effects. Parental qualities also have strong effects on academic attainment. This academic attainment is then a key determinant of subsequent market success, as measured by earnings.

PD November 1996. **TI** Self-Selection in the State School System. **AU** Robertson, Donald; Symons, James. **AA** Robertson: University of Cambridge and London School of Economics. Symons: London School of Economics and University College London. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 312; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 15. **PR** no charge. **JE** I21. **KW** School Peer Groups. Mixing. Competitive Solution.

AB With diminishing returns to the peer group, it is optimal social policy to mix children in schools. We consider what happens when, contrary to the outcome being determined by a social planner, schools and children are free to seek each other out: with some caveats, this leads to perfect segregation by child quality. It is shown that this is the worst possible outcome. We show also that a competitive system produces optimal allocation of children to schools.

Robinson, James A.

TI Why Did the West Extend the Franchise? Democracy, Inequality and Growth in Historical Perspective. **AU** Acemoglu, Daron; Robinson, James A.

Robinson, Peter

PD February 1997. **TI** Water Under the Bridge: Changes in Employment in Britain and the OECD. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 325; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England.

PG 66. **PR** no charge. **JE** J21, J24. **KW** Employment. Britain. OECD. Worker Qualifications.
AB Evidence is presented for the UK, the U.S. and France that the pace of change in the structure of employment by occupation has not been accelerating. Changes in the occupational structure of employment are taken to proxy changes in the net demand for labor by skill level. Efforts are made to make the data for these three countries comparable, reflecting the problem that data published by the ILO on the distribution of employment by occupation are not readily comparable. The direction of employment change across countries seems very similar, with manual jobs being replaced primarily by managerial, professional and technical jobs which tend to require higher qualification. However, in themselves the changes in employment which have occurred require only modest improvements each decade in the qualifications of the workforce. In the UK, skilled manual employment has declined at the same rate as unskilled manual employment. Changes in the qualifications structure of the workforce occur gradually across generations, as the children of people with few formal qualifications attain higher qualifications and their parents leave the labor force. In this sense the shock of the early 1980's recession in the UK represents 'water under the bridge'.

PD February 1997. **TI** Qualifications and the Labour Market in Britain: 1984-94 Skill Biased Change in the Demand for Labour or Credentialism? **AU** Robinson, Peter; Manacorda, Marco. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 330; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 35. **PR** no charge. **JE** J21, J24. **KW** Human. Capital. Formation. Worker Qualifications. Credentialist Hypothesis.
AB The paper looks at the change in the occupational and educational structure of employment in Britain over the period 1984-94. It shows that changes in the occupational structure of employment can only explain a modest part of the increase in the holding of qualifications by the employed workforce. On the other hand, the increase in the proportion of the workforce with different qualifications over the period 1984-94 can predict with remarkable accuracy the structure of the occupations by qualifications in 1994, implying that the increased holding of qualifications by each successive age group simply results in employers of each occupation upping their education requirements as would be suggested by the credentialist hypothesis. The predictability of this process argues against an interpretation based on skill biased changes in the demand for labor, which would be expected to have a differential impact across occupations. These are stark conclusions, suggesting that the outputs of the education and training system in Britain over the period 1984-94 did not merely keep pace with labour market changes, but allowed employers to hire more qualified people for what in the data look like essentially the same jobs.

Rodriguez-Clare, Andres

TI The Value of Trade Agreements in the Presence of Political Pressures. **AU** Maggi, Giovanni; Rodriguez-Clare, Andres.

Roe, Terry L.

TI On Endogenous Growth: The Implications of Environmental Externalities. **AU** Elbasha, Elamin H.; Roe, Terry L.

PD April 1995. **TI** The Strategic Interdependence of a Shared Water Aquifer: A General Equilibrium Analysis. **AU** Roe, Terry L.; Diao, Xinshen. **AA** University of Minnesota. **SR** University of Minnesota Economic Development Center Bulletin: 95/02; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 30. **PR** no charge. **JE** C68, D72, F11, Q25. **KW** Water. General Equilibrium. Trade. Cooperative Game.
AB In a region with shared water aquifers, the use of water by one country becomes an externality to another. A policy to subsidize water is shown to lead to both countries being made worse off, but is likely to be supported by special interests having water rights, and those in sectors such as agricultural that use water relatively intensively. The unilateral water tax will reduce own country's GNP and rise GNP in the other country. Only when both countries impose a tax cooperatively, will GNP rise in both countries.

TI Environment, Welfare and Gains from Trade: A North-South Model in General Equilibrium. **AU** Diao, Xinshen; Roe, Terry L.

TI Environment in Three Classes of Endogenous Growth Models. **AU** Elbasha, Elamin H.; Roe, Terry L.

TI Sources of Sectoral Growth in an Economy Wide Context: The Case of U.S. Agriculture. **AU** Munisamy, Gopinath; Roe, Terry L.

TI General Equilibrium Analysis of Supply and Factor Returns in U.S. Agriculture, 1949-91. **AU** Munisamy, Gopinath; Roe, Terry L.

TI A Dynamic CGE Model: An Application of R&D-Based Endogenous Growth Model Theory. **AU** Diao, Xinshen; Elbasha, Elamin H.; Roe, Terry L.; Yeldan, Erinc.

TI R&D Spillovers: Evidence from U.S. Food Processing, Farm Machinery and Agriculture. **AU** Gopinath, Munisamy; Roe, Terry L.

Rogers, John H.

TI Regional Patterns in the Law of One Price: The Roles of Geography vs. Currencies. **AU** Engel, Charles; Rogers, John H.

Rogerson, Richard

TI Institutions and Labour Reallocation. **AU** Bertola, Giuseppe; Rogerson, Richard.

Romalis, John

TI Issues in Modelling Monetary Policy. **AU** Edey, Malcolm; Romalis, John.

TI External Influences on Output: An Industry Analysis. **AU** de Brouwer, Gordon; Romalis, John.

Romer, David

TI Trade and Growth: An Empirical Investigation. **AU** Frankel, Jeffrey A.; Romer, David.

Romer, Paul M.

PD January 1996. **TI** Why, Indeed, in America? Theory, History, and the Origins of Modern Economic Growth.

AA University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5443; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 11. **PR** $5.00. **JE** B41, N11, Q21, O41, O11. **KW** Growth. Natural Resources. Methodology.

AB When they are used together, economic history and new growth theory give a more complete picture of technological change than either can give on its own. An empirical strategy for studying growth that does not use historical evidence is likely to degenerate into sterile model testing exercises. Historical analysis that uses the wrong kind of theory or no theory may not emphasize the lessons about technology that generalize. The complementarity between these fields is illustrated by an analysis of early industrialization. The key theoretical observation is that larger markets and larger stocks of resources create substantially bigger incentives for discovering new ways to use the resources. This simple insight helps explain why the techniques of mass production emerged in the United States during the first half of the 19th century. It also helps explain how a narrow advantage in the techniques of mass production for a small set of goods grew into broad position of industrial supremacy by the middle of the 20th century.

Rose, Andrew K.

TI Currency Crashes in Emerging Markets: Empirical Indicators. **AU** Frankel, Jeffrey A.; Rose, Andrew K.

Rosenbaum, Dan T.

TI Repeat Use of Unemployment Insurance. **AU** Meyer, Bruce D.; Rosenbaum, Dan T.

Rotte, Ralph

TI Economic Incentives and Hospitalization in Germany. **AU** Zimmermann, Klaus F.; Geil, Peter; Million, Andreas; Rotte, Ralph.

Rowthom, Robert

PD September 1996. **TI** Unemployment, Wage Bargaining and Capital-Labor Substitution. **AA** University of Cambridge. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP38; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 19. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** E23, E24, E25. **KW** Unemployment. Capital. Elasticity of Substitution. Bargaining. Technical Progress.

AB Many economists believe that capital accumulation, technical progress and labor force expansion have no long-run effect on the unemployment rate. Such a view rests on the empirically doubtful assumption that the elasticity of substitution between labor and capital is equal to unity (i.e. that production is Cobb-Douglass). Using a simple mathematical model based on the work of Layard, Nickell and Jackman, this paper demonstrates that with a lower elasticity of substitution, the equilibrium unemployment rate is affected by all the above factors. It considers briefly what this implies for our understanding of modern economic history and for employment policy.

Russell, Bill

TI Towards an Understanding of Australia's Co-Movement With Foreign Business Cycles. **AU** de Roos, Nicolas; Russell, Bill.

Ruttan, Vernon W.

PD December 1996. **TI** Sources of Technical Change: Induced Innovation, Evolutionary Theory and Path Dependence. **AA** University of Minnesota. **SR** University of Minnesota Economic Development Center Bulletin: 96/04; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 60. **PR** no charge. **JE** O31. **KW** Technical Change. Induced Innovation. Evolutionary Theory. Path Dependence.

AB The 1960's through the 1980's were very productive of new theory and empirical insight into the sources of technical change. In this paper I argue that each of the three approaches that have been advanced -- induced technical change, evolutionary theory and path dependence -- is approaching a dead end. The induced technical change process is driven by changes in the economic environment in which the firm (or public research agency) finds itself. But its internal mechanism, the learning and search process, remain inside a black box. The evolutionary model builds on the behavioral theory of the firm in an attempt to provide a more realistic description of the internal workings of the black box. The strength of the path dependence interpretation lies in the importance it placed on the sequence of specific micro-level historical events. But it holds only for network technologies characterized by increasing returns to scale -- and only until the increasing returns have been exhausted. The three approaches should be regarded as components of a more general theory of the sources of technical change. In the later section of the paper steps that might be taken toward the development of a more general theory of the sources of technical change are suggested.

Ryan, Annette

TI Technology and Changes in Skill Structure: Evidence From an International Panel of Industries. **AU** Machin, Stephen; Ryan, Annette; Van Reenen, John.

Ryan, C.

TI The Simple Analytics of Models of Overlapping Generations. **AU** Sinclair, P. J. N.; Ryan, C.

Sacerdote, Bruce

TI Why is There More Crime in Cities? **AU** Glaeser, Edward L.; Sacerdote, Bruce.

Sachs, Jeffrey D.

PD December 1995. **TI** Natural Resource Abundance and Economic Growth. **AU** Sachs, Jeffrey D.; Warner, Andrew M. **AA** Sachs: Harvard Institute for International Development and National Bureau of Economic Research. Warner: Harvard Institute for International Development. **SR** National Bureau of Economic Research Working Paper: 5398; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** $5.00. **JE** O41, O13, F13. **KW** Growth. Mining. Resource Extraction. Political Economy.

AB One of the surprising features of modern economic growth is that economies with abundant natural resources have tended to grow less rapidly than natural-resource-scarce economies. In this paper the authors show that economies with a high ratio of natural resource exports to GDP in 1971 (the base year) tended to have low growth rates during the subsequent period 1971-89. This negative relationship holds true even after controlling for variables found to be important for economic growth, such as initial per capita income, trade policy, government efficiency, investment rates, and other variables. The authors explore the possible pathways for this negative relationship by studying the cross-country effects of resource endowments on trade policy, bureaucratic efficiency, and other determinants of growth. The authors also provide a simple theoretical model of endogenous growth that might help to explain the observed negative relationship.

PD January 1996. **TI** Reforms in Eastern Europe and the Former Soviet Union in Light of the East Asian Experiences. **AA** Harvard Institute for International Development and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5404; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 50. **PR** $5.00. **JE** P21, O11, O17. **KW** Asia. China. Russia. Reform. Socialism.

AB During the past five years, there has been an important debate over the differing styles of market reforms in the formerly planned economies in East Asia versus Eastern Europe and the former Soviet Union (EEFSU). This paper puts forward three related propositions. First, the rapid growth of East Asia, compared with economic contraction in EEFSU, reflects differences in economic structure and initial conditions, rather than differences in economic policymaking. Second, East Asian gradualism could not, and did not, work in EEFSU. Third, EEFSU continues to face serious problems with an overextended welfare state inherited from the socialist period.

TI Trends in Regional Inequality in China. **AU** Jian, Tinalun; Sachs, Jeffrey D.; Warner, Andrew M.

Sadoulet, Elisabeth

TI NAFTA and Agriculture: An Early Assessment. **AU** de Janvry, Alain; Sadoulet, Elisabeth.

TI Agricultural and Rural Development Policy in Latin America: New Directions and New Challenges. **AU** de Janvry, Alain; Key, Nigel; Sadoulet, Elisabeth.

TI The Role of Agriculture in Economic Development: Visible and Invisible Surplus Transfers. **AU** Winters, Paul; de Janvry, Alain; Sadoulet, Elisabeth; Stamoulis, Kostas.

Sako, M.

PD March 1997. **TI** Wage Bargaining in Japan: Why Employers and Unions Value Industry- Level Coordination. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 334; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, England. **PG** 37. **PR** no charge. **JE** J31, J50. **KW** Wage Bargaining. Japan. Unions. Employers.

AB The Japanese system of wage bargaining, known as Shunto, has attracted interest due to its superior macroeconomic outcomes (low unemployment and inflation). This paper examines the exact mechanisms for bringing about such outcomes by focusing on the nature of coordination among employers and unions at the industry and intersectoral levels. Based on interviews with Japanese employers and trade union leaders, this study found that: i) informal coordination among employers is more important than formal sanctions of employers' associations; ii) systematic coordination takes place among employers and unions at the industry level, the intersectoral level, and within corporate groupings, which facilitate a clear understanding of how prices in labor and product markets affect the competitiveness of leading sectors in the Japanese economy; and iii) there exists a clear labor-management consensus that the export-dependent metal sector should remain the pattern setter during wage bargaining.

Satchell, Stephen E.

TI Statistical Modelling of Asymmetric Risk in Asset Returns. **AU** Knight, John L.; Satchell, Stephen E.; Tran, Kien C.

TI Why Do Regime Switching Models Forecast so Badly? **AU** Dacco, Roberto; Satchell, Stephen E.

TI A Theoretical Analysis of Trading Rules: An Application to the Moving Average Case With Markovian Returns. **AU** Acar, Emmanuel; Satchell, Stephen E.

Schmid, Frank A.

TI Universal Banking and the Performance of German Firms. **AU** Gorton, Gary; Schmid, Frank A.

Schmidt, Klaus M.

PD January 1997. **TI** Methods of Privatization: Auctions, Bargaining and Give-Aways. **AU** Schmidt, Klaus M.; Schnitzer, Monika. **AA** University of Munich. **SR** Centre for Economic Policy Research Discussion Paper: 1541; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 34. **PR** 4 pounds or $8.00. **JE** C78, D44, D72. **KW** Privatization. Eastern Europe. Expropriation. Political Economy. Auctions.

AB The paper surveys recent results of auction theory, bargaining theory and political economy in order to compare different methods of privatization. We assume that a government is not only interested in maximizing revenues from privatization, but also in achieving an efficient allocation of ownership rights. We show that these two goals may conflict with each other. We argue that in a wide variety of circumstances the government should use an ascending open bid format, however, such as the traditional English auction. In particular, if there are more than two serious bidders, an English auction is more efficient and yields higher revenues than bargaining with a preselected buyer. Finally, if the government has to mass privatize, we show that giving away some fraction of all shares to the general population may be more efficient and yield higher revenues than a policy of selling all firms to the highest bidder.

PD January 1997. **TI** The Political Economy of Mass Privatization and the Risk of Expropriation. **AA** University of Munich. **SR** Centre for Economic Policy Research Discussion Paper: 1542; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 21. **PR** 4 pounds or $8.00. **JE** D72, L33. **KW** Privatization. Transition. Expropriation. Political Economy.

AB The privatization process in Eastern Europe is not irreversible. Future governments may want to expropriate successful private firms by increasing taxation or by renationalizing them in order to subsidize unsuccessful firms. The paper uses a simple median voter model to predict the policy of future governments. It is shown that there will be less expropriation the more shares are distributed free to the population. It is better to distribute shares equally across the population rather than to give them to insiders of each firm. Furthermore, people should be discouraged from selling their shares for cash. The threat of expropriation adversely affects investment and restructuring efforts. It is shown that a mass privatization scheme which includes substantial free distribution of shares may induce more investment, higher expected profits and higher privatization revenues for the government than a policy that relies exclusively on selling shares to the highest bidder.

Schmidt, Peter

TI Sampling Errors and Confidence Intervals for Order Statistics: Implementing the Family Support Act. **AU** Horrace, William C.; Schmidt, Peter; Witte, Ann Dryden.

Schmidt, Robert M.

TI Saving, Dependency and Development. **AU** Kelley, Allen C.; Schmidt, Robert M.

TI Toward a Cure for the Myopia and Tunnel Vision of the Population Debate: A Dose of Historical Perspective. **AU** Kelley, Allen C.; Schmidt, Robert M.

Schneider, Robert

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

Schnitzer, Monika

TI Methods of Privatization: Auctions, Bargaining and Give-Aways. **AU** Schmidt, Klaus M.; Schnitzer, Monika.

Schuermann, Til

TI Exact Maximum Likelihood Estimation of Observation-Driven Econometric Models. **AU** Diebold, Francis X.; Schuermann, Til.

Sefton, Martin

TI Funding Public Goods with Lotteries: Experimental Evidence. **AU** Morgan, John; Sefton, Martin.

Segal, Uzi

PD October 1996. **TI** How to Escape Dutch Books in Dynamic Choice. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Report: RR/9607; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. **PG** 13. **PR** $10.00. **JE** C70. **KW** Sequential Choices. Preferences.

AB This paper discusses two ways in which decision makers facing sequential choices can make themselves invulnerable to Dutch books. The first is based on the observation that if preferences are quasi concave, then even if Y is preferred to X, there may be an a between zero and one such that aX + (1-a)Y is even better. Therefore, a decision maker with such preferences will prefer to randomize when he is offered to replace X with Y. The second situation in which Dutch books are ineffective is when the decision maker knows what zero probability event happened in the first period.

PD October 1996. **TI** Let's Agree that All Dictatorships are Equally Bad. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Report: RR/9608; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. **PG** 18. **PR** $10.00. **JE** D60. **KW** Preferences. Social Policies.

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 private consumption and preferences over all possible social policies. I offer a set of axioms which imply that the best social policy is to maximize a weighted sum of individual utility levels. The weight of an individual given 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.

Seghezza, Elena

TI Testing for Trade-Induced Investment-Led Growth. **AU** Baldwin, Richard E.; Seghezza, Elena.

Senhadji, Abdelhak S.

TI Deterministic vs. Stochastic Trend in U.S. GNP, Yet Again. **AU** Diebold, Francis X.; Senhadji, Abdelhak S.

Shapiro, Matthew D.

PD May 1996. **TI** Generating Non-Standard Multivariate Distributions with an Application to Mismeasurement in the CPI. **AU** Shapiro, Matthew D.; Wilcox, David W. **AA** Shapiro: University of Michigan and National Bureau of Economic Research. Wilcox: Board of Governors of the Federal Reserve System. **SR** National Bureau of Economic Research Technical Paper: 196; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C13, C43, E32. **KW** Joint Distributions. Marginal Distributions. Consumer Price Index.

AB This paper shows how to generate the joint distribution of correlated random variables with specified marginal distributions. For cases where the marginal distributions are either normal or lognormal, it shows how to calculate analytically the correlation of the underlying normal distributions to induce the desired correlation between the variables. It also provides a method for calculating the joint distribution in the case of arbitrary marginal distributions. The paper applies the technique to calculating the distribution of the overall bias in the consumer price index. The technique should also be applicable to estimation by simulated moments or simulated likelihoods and to Monte Carlo analysis.

Shavell, Steven

PD February 1996. **TI** Threats Without Binding Commitment. **AU** Shavell, Steven; Spier, Kathryn. **AA** Shavell: Harvard University and National Bureau of

Economic Research. Spier: Northwestern University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5461; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 17. **PR** $5.00. **JE** C73, D84, D81. **KW** Credible Commitment. Dynamic Inconsistency. Subgame Perfect.

AB This paper explores the power of threats in the absence of binding commitments. The threatener cannot commit to carrying out the threat if the victim refuses payment, and cannot commit to not carrying out the threat if payment is made. If exercising the threat is costly to the threatener, then the threat cannot succeed in extracting money from the victim. If exercising the threat would benefit the threatener, however, then the threat's success depends upon whether the threat may be repeated. In the equilibrium of a finite-period game, the threat is carried out and the victim makes no payments. In an infinite-horizon game, however, it is an equilibrium for the victim to make a stream of payments over time. The expectations of future payments keeps the threatener from exercising the threat.

Shea, John

PD March 1996. **TI** Instrument Relevance in Multivariate Linear Models: A Simple Measure. **AA** University of Wisconsin and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 193; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C51, C52. **KW** Instrumental Variables. Instrument Relevance. Endogenous Variables.

AB The correlation between instruments and explanatory variables is a key determinant of the performance of the instrumental variables estimator. The R-squared from regressing the explanatory variable on the instrument vector is a useful measure of relevance in univariate models, but can be misleading when there are multiple endogenous variables. This paper proposes a computationally simple partial R-squared measure of instrument relevance for multivariate models.

Shepard, Andrea

TI Sticky Prices, Inventories, and Market Power in Wholesale Gasoline Markets. **AU** Borenstein, Severin; Shepard, Andrea.

Shiller, Robert J.

PD January 1997. **TI** Expanding the Scope of Individual Risk Management: Moral Hazard and Other Behavioral Considerations. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1145; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 29. **PR** no charge. **JE** G20. **KW** Hedging. Insurance. Portfolio Management. Mortgage. Risk Sharing.

AB There is a large potential for improving individual risk management through new risk management contracts and associated new index-settled derivatives. However, there are some difficult problems in designing contracts so that they will be used effectively. Individuals have idiosyncratic individual risks that can be hedged only at some real resource cost due to moral hazard. Individuals seem to exhibit behavior indicative of lack of appreciation of the principles of risk management. These problems are discussed, and some potential new risk management contracts that would make improvements in the management of major income risks are proposed.

Shimer, Robert

PD March 1997. **TI** Assortative Matching and Search. **AU** Shimer, Robert; Smith, Lones. **AA** Shimer: Princeton University. Smith: Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 97/02; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 44. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** C78, D83. **KW** Assortative Matching. Super Modularity.

AB This paper reprises Becker's (1973) neoclassical marriage market model, assuming search frictions. We characterize equilibrium and constrained efficient matchings, and prove equilibrium existence. We then compare catching patterns with Becker's benchmark frictionless allocation, where positively or negatively assortative matching arises as agents' types are complements or substitutes in production. We formalize notion of assortative matching with search frictions in the spirit of affiliation, and demonstrate that Becker's condition no longer suffices. Fortunately, we prove that assortative matching does extend to both search settings-for all search frictions and type distributions- under stronger assumptions. Examples illustrate the necessity of these conditions. We show that our assortative matching notion in fact implies that everyone matches with a convex set of types; as a byproduct, this paper also provides a theory of convex matching sets.

TI Efficient Wage Dispersion. **AU** Acemoglu, Daron; Shimer, Robert.

TI Efficient Unemployment Insurance. **AU** Acemoglu, Daron; Shimer, Robert.

Shin, Hyun Song

TI Is Common Knowledge Possible in Games with Knightian Uncertainty? **AU** Mukerji, Sujoy; Shin, Hyun Song.

Shubik, M.

TI Price Variations in a Stock Market with Many Agents. **AU** Bak, P.; Paczuski, M.; Shubik, M.

Siconolfi, P.

TI Prices, Asset Markets and Indeterminacy. **AU** Polemarchakis, H. M.; Siconolfi, P.

Simon, John

TI Australia's Retirement Income System: Implications for Saving and Capital Markets. **AU** Edey, Malcolm; Simon, John.

PD December 1996. **TI** A Markov-Switching Model of Inflation in Australia. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia, Research Discussion Paper: 9611; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. **PG** 22. **PR** no charge. **JE** C22, E31, O56. **KW** Inflation. Inflation Expectations. Inflation Regimes. Markov- Switching Model. Hamilton Filter.

AB This paper applies the methodology of Markov-switching models to describe the inflation process in Australia in the period since the early 1960's. In contrast to conventional modeling, the approach makes explicit allowance for the possibility of structural change: inflation is modeled within a framework that allows endogenous switching between simple inflation equations. The approach may be relevant to understanding shifts in inflation expectations if the public also uses relatively simple forecasting rules in formulating expectations. The results suggest that inflation is reasonably well represented by relatively simple functions of past inflation and an output gap term, with major regime changes occurring in the early 1970's and early 1990's.

Sinclair, P. J. N.

PD March 1996. **TI** The Simple Analytics of Models of Overlapping Generations. **AU** Sinclair, P. J. N.; Ryan, C. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/09; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 22. **PR** 2 pounds; no charge to students. **JE** C62, E10, E30. **KW** Overlapping Generations. Equilibrium. Cycles. Chaos. Antimonotonicity.

AB We analyze the key characteristics of simple models of overlapping generations where capital is endogenous, and money plays a no role. The main focus is on the codynamics of interest rates, wages, and consumption with capital. Various phenomena that could lead to cyclical or chaotic behavior are discussed.

PD January 1997. **TI** Has the Phillips Curve Been Reborn? **AU** Sinclair, P. J. N.; Horsewood, Nicholas. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 97/03; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 28. **PR** 2 pounds; no charge to students. **JE** E24, E31. **KW** Phillips Curve. Unemployment. Inflation. Menu Costs.

AB Post-1983 quarterly evidence points to the existence (or rebirth) of a well determined convex, downward-sloping Phillips curve for most OECD countries, even in the long run. For the United States, however, the Phillips curve appears to be upward-sloping in this period. Various explanations are considered: reduced variances of expected inflation, as indicated by the interest differential between local currency medium- dated stock and UK indexed gilts; the combination of reduced inflation and increased progressivity of the tax-benefit system, which has occurred in most countries except the U.S.; and particularly in Western Europe, the presence of labor-market menu costs, faced by imperfectly competitive firms in Nash equilibrium with unions.

PD January 1997. **TI** Does Faster Inflation Raise or Cut the Rate of Growth? **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 97/04; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 25. **PR** 2 pounds; no charge to students. **JE** E31. **KW** Inflation. Growth.

AB This paper addresses the long run impact of inflation on the rate of growth. Inflation could increase or retard growth. The net effect is found to depend upon the nature of the dominant mechanism of endogenous growth, the extent to which real assets may provide liquidity services, whether training primarily involves inputs of time or materials, and how liquidity affects transaction-time as opposed to direct utility. The paper argues that a negative overall effect is likely.

Singh, Ajit

TI Takeovers, Institutional Investment and the Persistence of Profits. **AU** Cosh, Andy; Hughes, Alan; Singh, Ajit; Lee, Kevin.

Sinn, Hans-Werner

PD January 1996. **TI** The Subsidiarity Principle and Market Failure in Systems Competition. **AA** University of Munich and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5411; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** $5.00. **JE** D62, D72, H11, H23, H41. **KW**

AB Contrary of frequent contention, systems competition cannot work when governments respect the Subsidiarity Principle. The principle implies that governments step in where markets fail. Reintroducing markets through the back door of systems competition will again result in market failure. Three models are presented which illustrate this wisdom. The first is concerned with congestion-prone public goods and shows that fiscal competition may be ruinous for the governments. The second considers the insurance function of redistributive taxation and shows that systems competition may suffer from adverse selection. The third studies the role of quality regulation and shows that systems competition may be a competition of laxity resulting in inefficiently low quality standards.

Small, Arthur

TI Implications of GATT for Eastern Europe and the Baltics. **AU** Michalska, Grazyna; Goodhue, Rachael; Small, Arthur.

TI The Economic Value of Patents, Licenses, and Plant Variety Protection. **AU** Rausser, Gordon; Small, Arthur.

TI Alternative Trade and Support Strategies for CAP Integration. **AU** Rausser, Gordon; Small, Arthur.

Smart, Scott

PD February 1996. **TI** A Citation-Based Test for Discrimination at Economics and Finance Journals. **AU** Smart, Scott; Waldfogel, Joel **AA** Smart: Indiana University. Waldfogel: Yale University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5460; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** $5.00. **JE** A14, J71, J44. **KW** Discrimination. Economists. Journals. Quality.

AB Discrimination is notoriously difficult to document. This study develops a test for possible bias -- with respect to author gender, prestige of author's institution, article content (theory vs. empiricism), and whether the author has ties to the editor -- using a new approach based on an analysis of citations. The authors treat citations as a measure of article quality and ask whether papers by certain groups receive systematically different numbers of citations. For accepted papers, editors determine articles' order within journal issue and length based on their quality assessments. The authors show that these "editorial treatment" decisions are highly correlated with citations. Thus, the authors infer bias against a particular group of authors if their published articles have more citations, conditional editorial treatment, than other articles. Surprisingly, the authors document systematic editorial bias in favor of authors located outside of top institutions.

Smith, Lones

TI Social Learning in a Changing World. **AU** Moscarini, Giuseppe; Ottaviani, Marco; Smith, Lones.

PD January 1997. **TI** A Graphical Depiction of the Rubinstein-Stahl Bargaining Solution. **AA** Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 97/01; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 5. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** C78, D74. **KW** Bargaining. Alternating Offers.
AB I illustrate the convergence to Rubinstein's (1982) bargaining outcome of the solutions of the finite-horizon truncations of that game. The depiction is new, and hopefully instructive, and has the flavor of international trade diagrams.

TI Assortative Matching and Search. **AU** Shimer, Robert; Smith, Lones.

PD March 1997. **TI** Time Consistent Optimal Stopping. **AA** Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology, Department of Economics Working Paper: 97/05; Department of Economics, E52-252, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 4. **PR** $7.00 U.S., Canada, Mexico; $10.00 other international. **JE** C44. **KW** Time-Consistent. Von Neumann. Morgenstern Utility. Affine. Time- Preference.
AB This paper investigates time consistent preferences where the strategy space consists of a stopping time, and the decision-maker also acts under uncertainty. Despite the requirement of identical vNM preferences, it is shown that in addition to the exponential discounting class identified by Strotz (1965), negative affine discounting also yields time consistent behavior.

Smith, Ron

TI Current Account Solvency and the Feldstein-Horioka Puzzle. **AU** Coakley, Jerry; Kulasi, Farida; Smith, Ron.

TI Testing for Stationarity of the Real Exchange Rate in Developing Countries. **AU** Boyd, Derick; Smith, Ron.

Snower, Dennis J.

TI Restructuring Production and Work. **AU** Lindbeck, Assar; Snower, Dennis J.

PD November 1996. **TI** On the Foundations of Wage Bargaining. **AU** Snower, Dennis J.; Manzini, Paola. **AA** Snower: Birkbeck College. Manzini: University of Exeter. **SR** Centre for Economic Policy Research, Discussion Paper: 1514; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 29. **PR** 4 pounds or $8.00. **JE** C78, J31, J32. **KW** Bargaining. Outside Option. Labor Turnover Costs. Insider-Outsider.
AB This paper provides strategic foundations for the insight that the bargaining power of employees depends on the firm's labor turnover costs. The analysis shows how these costs determine the firm's degree of substitutability between two sets of wage negotiations: (i) those the firm conducts with its incumbent employees; and (ii) the alternative negotiations it could conduct with new job seekers. In this context, labor turnover costs not only influence the negotiators' alternatives to bargaining (i.e. the negotiators' fall-back positions and outside options); they affect the nature of the bargaining process itself. This approach leads to a new theory of wage determination.

Snyder, Christopher M.

TI Property Rights and Incomplete Contracts: Dealing with Nuisance. **AU** Pitchford, Rohan; Snyder, Christopher M.

Somwaru, Agapi

TI Dynamic Gains and Losses from Trade Reform: An Intertemporal General Equilibrium Model of the United States and MERCOSUR. **AU** Diao, Xinshen; Somwaru, Agapi.

Spady, Richard H.

TI Information Theoretic Approaches to Inference in Moment Condition Models. **AU** Imbens, Guido W.; Johnson, Phillip; Spady, Richard H.

Spaventa, Luigi

TI High Yields: The Spread on German Interest Rates. **AU** Favero, Carlo; Giavazzi, Francesco; Spaventa, Luigi.

Spencer, Barbara J.

TI Rent-Shifting Export Subsidies with an Imported Intermediate Product. **AU** Ishikawa, Jota; Spencer, Barbara J.

Spier, Kathryn

TI Threats Without Binding Commitment. **AU** Shavell, Steven; Spier, Kathryn.

Spilimbergo, Antonio

PD March 1996. **TI** The Welfare Implications of Trading Blocs Among Countries with Different Endowments. **AU** Spilimbergo, Antonio; Stein, Ernesto. **AA** Inter-American Development Bank. **SR** National Bureau of Economic Research Working Paper: 5472; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 39. **PR** $5.00. **JE** D23, F11, F13. **KW** Liberalization. Trading Blocs. Transaction Costs.
AB In this paper, the authors present a model where trade is motivated both by preference for variety and comparative advantages. The authors use this framework to analyze the welfare implications of trading blocs among countries with different endowments with and without transportation costs. In this framework, the authors address the following issues: a) the welfare implications of the consolidation of the world into a few trading blocs; b) the different incentives that rich and poor countries have in choosing their partners in trade arrangements; c) whether the welfare consequences of continental preferential trade arrangements depend on the relative endowments.

Srivastava, Pradeep

TI The Real Exchange Rate in India: Determinants and Targeting. **AU** Patel, Urgit R.; Srivastava, Pradeep.

Staiger, Douglas

PD March 1996. **TI** How Precise Are Estimates of the

Targeting. **AU** Patel, Urgit R.; Srivastava, Pradeep.

Staiger, Douglas

PD March 1996. **TI** How Precise Are Estimates of the Natural Rate of Unemployment? **AU** Staiger, Douglas; Stock, James H.; Watson, Mark W. **AA** Staiger and Stock: Harvard University and National Bureau of Economic Research. Watson: Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5477; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** $5.00. **JE** J64, E24, C13. **KW** Unemployment. Phillips Curve. Estimation.

AB This paper investigates the precision of conventional and unconventional estimates of the natural rate of unemployment (the "NAIRU"). The main finding is that the NAIRU is imprecisely estimated: a typical 95 percent confidence interval for the NAIRU in 1990 is 5.1 percent to 7.7 percent. This imprecision obtains whether the natural rate is modeled as a constant, as a slowly changing function of time, as an unobserved random walk, or as a function of various labor market fundamentals; it obtains using other series for unemployment and inflation, including additional supply shift variables in the Phillips curve, using monthly or quarterly data, and using various measures for expected inflation. This imprecision suggests caution in using the NAIRU to guide monetary policy.

Stein, Ernesto

TI Regional Trading Arrangements: Natural or Super-Natural? **AU** Frankel, Jeffrey A.; Stein, Ernesto; Wei, Shang-Jin.

TI The Welfare Implications of Trading Blocs Among Countries with Different Endowments. **AU** Spilimbergo, Antonio; Stein, Ernesto.

Stein, Jeremy C.

TI Risk Management, Capital Budgeting and Capital Structure Policy for Financial Institutions: An Integrated Approach. **AU** Froot, Kenneth A.; Stein, Jeremy C.

Stern, N.

TI Promoting an Effective Market Economy in a Changing World. **AU** Buiter, Willem H.; Lago, Ricardo; Stern, N.

Stevens, Ann Huff

PD December 1995. **TI** Climbing Out of Poverty, Falling Back in: Measuring the Persistence of Poverty Over Multiple Spells. **AA** Rutgers University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5390; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 38. **PR** $5.00. **JE** I31, C41. **KW** Poverty. Persistence. Duration.

AB This paper investigates the persistence of poverty over individuals' lifetimes using a hazard rate, or spells approach. Previous research on poverty dynamics using the spells approach has been limited by its failure to take into account multiple episodes of poverty. This paper estimates hazard models for exiting from and for returning to poverty and uses the estimated parameters to calculate distributions of total time spent in poverty over multiple spells, using longitudinal data from the Panel Study of Income Dynamics. For black and white individuals falling into poverty in some year, approximately 50 to 30 percent, respectively, will have family income below the poverty line in at least five of the next ten years. A single spells approach predicts comparable figures of only 26 and 13 percent.

Stinson, Thomas F.

TI An Alternative Measure of Human Capital Stock. **AU** Tao, Hung-Lin; Stinson, Thomas F.

Stirati, Antonella

TI The Economic Consequences of Innovations in Italian Manufacturing Firms: Theory and Results from the Community Innovation Survey. **AU** Cesaratto, Sergio; Stirati, Antonella.

Stock, James H.

TI How Precise Are Estimates of the Natural Rate of Unemployment? **AU** Staiger, Douglas; Stock, James H.; Watson, Mark W.

PD July 1996. **TI** Asymptotics for GMM Estimators with Weak Instruments. **AU** Stock, James H.; Wright, Jonathan. **AA** Stock: Harvard University and National Bureau of Economic Research. Wright: Harvard University. **SR** National Bureau of Economic Research Technical Paper: 198; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C13, C30, C32, C51, G12. **KW** Generalized Method-of-Moments. Estimators. Weak Instruments. Instrumental Variables. Asymptotic Approximiations.

AB This paper develops asymptotic distribution theory for generalized method of moments (GMM) estimators and test statistics when some of the parameters are well identified, but others are poorly identified because of weak instruments. The asymptotic theory entails applying empirical process theory to obtain a limiting representation of the (concentrated) objective function as a stochastic process. The general results are specialized to two leading cases, linear instrumental variables regression and GMM estimation of Euler equations obtained from the consumption-based capital asset pricing model with power utility. Numerical results of the latter model confirm that finite sample distributions can deviate substantially from normality, and indicate that these deviations are captured by the weak instrument asymptotic approximations.

Stocken, Phillip

TI The Effects of Endogenous Information Acquisition About Business Risk on Audit Pricing. **AU** Morgan, John; Stocken, Phillip.

Subbaraman, Robert

TI Share Prices and Investment. **AU** Andersen, Michael; Subbaraman, Robert.

Summer, Martin

TI Monitoring Reports With a Self-Interested Inspector. **AU** Gotz, Muriel; Summer, Martin.

PD March 1996. **TI** The Optimal Quantity of Money in Overlapping Generations Models and in Models with a Representative Consumer. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/12; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 13. **PR** 2 pounds; no charge to students. **JE** E40, E52. **KW** Quantity of Money. Monetary Theory.

AB For modern macroeconomic theory the infinitely lived representative agent model and the overlapping generations model, are the two most important frameworks of analysis. Both models form a unified approach in the sense that they are competitive general equilibrium models. When it comes to monetary policy however both models give a different answer to the question of the optimal quantity of money. In the representative agent model (pareto) optimality requires that the inflation rate is equal to the rate of time preference of the representative consumer. If the same question is analyzed in an overlapping generations framework it turns out that the optimal inflation rate has to be equal to the population growth rate. Since it is not very satisfactory that the answer to an important question of monetary policy differs depending on the modeling framework used it would be desirable to have a better understanding why these models come to different conclusions. This paper takes a first step in comparing these two different results.

Sun, Yeneng

TI Hyperfinite Asset Pricing Theory. **AU** Khan, M. Ali; Sun, Yeneng.

Sunley, Peter

TI Slow Convergence? Post-Neoclassical Endogenous Growth Theory and Regional Development. **AU** Martin, Ron; Sunley, Peter.

Sutherland, Holly

TI The Fiscal and Distributional Implications of Job Generation. **AU** Kitson, Michael; Michie, Jonathan; Sutherland, Holly.

Swann, Peter

TI A Model of Demand with Interactions Among Consumers. **AU** Cowan, Robin; Cowan, William; Swann, Peter.

Symons, James

TI Self-Selection in the State School System. **AU** Robertson, Donald; Symons, James.

Symons, Jim

TI Do Peer Groups Matter? Peer Group versus Schooling Effects on Academic Attainment. **AU** Robertson, Donald; Symons, Jim.

Tallman, Ellis W.

PD November 1996. **TI** The Information Content of Financial Aggregates in Australia. **AU** Tallman, Ellis W.; Chandra, Naveen. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia, Research Discussion Paper: 9606; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. **PG** 28. **PR** no charge. **JE** E44, E51. **KW** Monetary Aggregates. Financial Aggregates. Forecasting Accuracy. Vector Autoregression.

AB This paper examines the information provided by financial aggregates as predictors of real output and inflation. We employ vector autoregression (VAR) techniques to summarize the information in the data, providing evidence on the incremental forecasting value of financial aggregates in a range of forecasting systems for these variables. The in-sample results suggest significant predictive power in only a small number of cases. We then test the forecast performance of the VAR systems for two years out-of-sample in order to mimic more closely the real-time forecasting problem faced by policymakers. Overall, both in-sample and out-of-sample results suggest no robust finding of exploitable information for forecasting purposes in any of the financial aggregates under examination. There is some evidence that the aggregates yield improved forecasts late in the sample period, but there is insufficient subsequent data to draw robust conclusions from this.

Tamura, Akiko

TI Japanese and U.S. Exports and Investment as Conducts of Growth. **AU** Eaton, Jonathan; Tamura, Akiko.

Tao, Hung-Lin

PD April 1997. **TI** An Alternative Measure of Human Capital Stock. **AU** Tao, Hung-Lin; Stinson, Thomas F. **AA** Tao: Soochow University. Stinson: University of Minnesota. **SR** University of Minnesota Economic Development Center Bulletin: 97/01; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 31. **PR** no charge. **JE** C82, E25, J24. **KW** Human Capital.

AB An integrated approach for estimating the stock of human capital in the United States is developed which eliminates well known problems associated with both the cost and income based methods currently in use. Historical information on the cost of the educational investment made in base entrants (individuals who enter the full time labor force immediately following high school graduation) and the wage rate they receive upon entry into the work force is used to compute a rental rate for human capital. The human capital stock for other cohorts of the work force is then estimated using that rental rate and the reported earnings for each population subgroup. This method neutralizes the cost identification problems associated with the work of Kendrick and Eisner. It also allows a more realistic treatment of the depreciation and appreciation of human capital. When used to estimate a Cobb-Douglas production function of the U.S. economy for the period 1963-1988, this measure provided more explanatory power than hours of labor.

Tarditi, Alison

PD November 1996. **TI** Modelling the Australian Exchange Rate, Long Bond Yield and Inflationary Expectations. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia, Research Discussion Paper: 9608; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. **PG** 41. **PR** no charge. **JE** C32, E44, F31, F43. **KW** Exchange Rate. Bond Yield. Inflation Expectations. Markov Switching.

AB Interest rates and exchange rates now constitute two of the most important channels through which macroeconomic policy in Australia can effect the broader economy. It is widely recognized that expectations play a critical role in these mechanisms, affecting both the timing and speed with which interest and exchange rates transmit shocks through to real activity and prices. Over the longer run, the influence of these two asset prices extends to the efficient allocation of capital and resources. This paper builds on previous work undertaken at the Reserve Bank of Australia and the OECD to develop single-equation, behavioral models of these two variables. Consideration is paid to the role of inflation expectations in effecting their behavior. In particular, a model of ex ante real bond yields is estimated using a measure of forward-looking inflationary expectations that has been constructed by recourse to a Markov switching technique.

Tarling, Roger

TI Economic Functioning, Self-Sufficiency and Full Employment. **AU** Wilkinson, Frank; Tarling, Roger.

Tatom, John A.

PD February 1994. **TI** Are There Adverse Real Effects from Monetary Policy Coordination? Some Evidence from Austria, Belgium and the Netherlands. **AU** Tatom, John A.; Proske, Dieter. **AA** Tatom: Federal Reserve Bank of St. Louis. Proske: Austrian National Bank. **SR** Federal Reserve Bank of St. Louis Working Paper: 94/018A; Research Division, Working Papers, Federal Reserve Bank of St. Louis, P.O. Box 442, St. Louis, MO 63166. Website: www.stls.frb.org. **PG** 45. **PR** no charge. **JE** E30, E52, F31, F33, F41, F42. **KW** Exchange Rate Regimes. Monetary Policy. Policy Coordination.

AB A central hypothesis and concern of some skeptics of European monetary union is that monetary policy coordination to secure a peg to the German mark (DM) will tie real economic performance, especially the unemployment rate, to that in Germany. Evidence on this hypothesis can be found in Austria, Belgium and the Netherlands, however, where currencies have been tightly pegged to the mark since 1979, 1986 and 1984, respectively. This paper reviews the theoretical link between a country's real performance and its coordination with foreign economic policy. It uses the three countries' Phillips curves to gauge real economic performance; it tests whether Phillips curve parameters have shifted adversely following the introduction of the DM-peg and whether any such shift is related to German unemployment rate movements. The article concludes that coordination does not have adverse economic effects on real economic performance.

Taylor, Alan M.

PD January 1996. **TI** On the Costs of Inward-Looking Development: Historical Perspectives on Price Distortions, Growth, and Divergence in Latin America from the 1930's to the 1980's. **AA** Northwestern University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5432; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** $5.00. **JE** O11, O17, F13, O54. **KW** Trade. Liberalization. Development. Growth.

AB From the 1930's to the 1980's, economic policies in Latin America epitomized the inward-looking model of development. The model emerged in the Depression, and was later codified in unorthodox economic theories. Even though economic performance was seen as disappointing by the 1960's, the distortions of the regime were long lived, persisting and worsening into the 1970's and 1980's. I examine the costs of distortions and explore the structural differences between growth dynamics in Latin America and elsewhere. Distortions have pervasive and profound effects on many aspects of the growth process, and help explain divergent development in the region.

Taylor, M. Scott

TI Open Access Renewable Resources: Trade and Trade Policy in a Two- Country Model. **AU** Brander, James A.; Taylor, M. Scott.

Thisse, Jacques-Francois

PD January 1997. **TI** On the Strategic Community Development. **AU** Thisse, Jacques-Francois; Henderson, J. Vernon. **AA** Thisse: Universite Catholique de Louvain. Henderson: Brown University. **SR** Centre for Economic Policy Research Discussion Paper: 1550; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 20. **PR** 4 pounds or $8.00. **JE** H71, L13, R31, R51. **KW** Land Development. Tiebout Model. Strategic Pricing. Tax Competition.

AB This paper examines strategic behavior of developers who, through offering different public good packages and revenue/fiscal schemes, compete for residents who are differentiated by income. There is an endogenous determination of numbers and sizes of communities. Developers have an incentive to strongly differentiate their public good offerings. In terms of pricing strategies, developers exhibit sharply contrasting behaviors. In low-income communities housing consumption is subsidized once lots are priced. In high-income communities housing consumption is generally taxed.

Thomas, Barry V. S.

PD August 1996. **TI** Infrastructure and Regional Growth in the European Union. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/25; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. **PG** 18. **PR** 2 pounds; no charge to students. **JE** H54, O40, O52, R11, R58. **KW** Infrastructure. Regional Policy. Regional Growth. Convergence.

AB This paper is concerned with the role of public infrastructure facilities in promoting growth and convergence in European regional economies. Current EU regional policy aimed at the creation of infrastructure in lagging regions is discussed and the literature concerned with the role of infrastructure in the regional development process is reviewed. An empirical model is discussed and then used to investigate how regional endowments of infrastructure facilities across 70 regions in six EU countries influence regional growth rates. The results suggest that improving infrastructure facilities of a single type has no observable impact on a region's growth rate, but improvements across a broad range of production related infrastructure types can be beneficial to growth. This then suggests that there are important spillovers in the utilization of different types of infrastructure and that this can have important regional policy implications.

Thorton, Daniel L.

TI Asymmetry of the Prime Rate and Firms' Preference for

Internal Finance. **AU** Dueker, J.; Thorton, Daniel L.

Thursby, Marie

TI Whither Flat Panel Displays? **AU** Krishna, Kala; Thursby, Marie.

Tirole, Jean

TI Private and Public Supply of Liquidity. **AU** Holmstrom, Bengt; Tirole, Jean.

Tobin, James

PD October 1996. **TI** Can We Grow Faster? **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1149; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 21. **PR** no charge. **JE** E20. **KW** Growth Policies. Supply-Side. NAIRU.

AB It is essential to distinguish between limits on national output and limits on its rate of growth. In the short run if output is below potential, demand stimulus can temporarily increase output and employment, with growth rates that cannot be sustained once the economy reaches full employment, potential output. This barrier is commonly called the NAIRU. The paper discusses the possibility that the economy can reach lower unemployment rates than previously thought, without increasing inflation. As to raising the sustainable rate of growth of potential output, the paper discusses skeptically various proposals: fiscal austerity, tax cuts, downsizing government. Many proposals can at best raise the level of output, not its sustainable growth; many can do neither; some are perverse. Government policies to raise national saving, private and public investment in tangible and human capital, science and technology are the best hopes, but the payoffs are likely to be slow.

PD March 1997. **TI** Supply Constraints on Employment and Output: NAIRU versus Natural Rate. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1158; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 25. **PR** no charge. **JE** E20. **KW** NAIRU. Natural Rate. Unemployment. Inflation.

AB NAIRU and NATURAL RATE are not synonymous. NAIRU is a macro outcome of an economy with many labor markets in diverse states of excess demand and excess supply. NAIRU represents an overall balance between the inflation-increasing pressures from excess-demand markets and the inflation-decreasing pressures from excess-supply markets. The natural rate, as described by Friedman, is a feature of Walrasian market- clearing general equilibrium. While the NAIRU fits into a Keynesian model, the natural rate is an aspect of a New Classical model. The determinants of the two are theoretically different, and so are their implications for policy. The NAIRU varies from time to time as the relationships between unemployment, vacancies, and wage changes vary, and as the dispersion of excess demands and supplies across markets changes. In this decade, these developments appear to be reducing the NAIRU, in contrast to the unfavorable circumstances of the 1970's.

Tran, Kien C.

TI Statistical Modelling of Asymmetric Risk in Asset Returns. **AU** Knight, John L.; Satchell, Stephen E.; Tran, Kien C.

Trau, Fabrizio

PD March 1996. **TI** Why Do Firms Grow? **AA** Centro Studi Confindustria. **SR** University of Cambridge, ESRC Centre for Business Research Working Papers: WP26; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 42. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** D20, L10, L20, M20. **KW** Firm Growth. Returns to Scale. Firm Behavior. Firm Organization. Firm Objectives.

AB This article reviews the wide range of non-neoclassical theoretical approaches which have been developed to understand the growth of firms. It stresses the need for theory to analyze the internal functioning of complex organisms, deals with both supply and demand issues, and reviews the role played by technological, financial and organizational determinants of growth, as well as entrepreneurial motivation.

Trognon, Alain

TI A La Recherche Des Moments Perdus: Covariance Models for Unbalanced Panels with Endogenous Death. **AU** Abowd, John M.; Crepon, Bruno; Kramarz, Francis; Trognon, Alain.

Tyers, Rod

PD November 1996. **TI** Developing Country Export Growth Technology and Labour Markets in Developed Countries: General Equilibrium Perspectives. **AU** Tyers, Rod; Duncan, Ron. **AA** Tyers and Duncan: Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 315; Department of Economics, The Faculties, Australian National University, Canberra ACT 0200, Australia. **PG** 20. **PR** no charge. **JE** F13, J31. **KW** Trade. Wages. Technology.

AB This paper briefly summarizes the state of the debate and describes the results of a recent study of the links between trade, technical change and labor market behavior. That study showed that comparatively minor generalizations of the standard Heckscher-Ohlin-Samuelson model of trading countries substantially moderate the Stolper-Samuelson factor reward changes stemming from trade reform. Results from a global general equilibrium analysis suggest that changes in trade are a comparatively minor explanator of the observed shifts in labor demand and that skilled-labor-using technical change would appear most important. Any protectionist response against developing countries, driven by concerns about wage inequality or unemployment, is shown to be counterproductive.

TI Trade Shocks and the Magnitude of Transmitted Wage Adjustments. **AU** Falvey, Rod; Tyers, Rod; McDougall, Robert.

Ulph, Alistair

TI Trade Liberalisation and Innovative Success with Unionised Labour Markets. **AU** Piermartini, Roberta; Ulph, Alistair.

PD January 1997. **TI** Harmonisation, Minimum Standards and Optimal International Environmental Policy Under Asymmetric Information. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9701; Discussion Paper Secretary, Department of Economics, University of

Southampton, Southampton S017 1BJ, England. Website: www.soton.ac.uk/discp.html. **PG** 29. **PR** no charge. **JE** C70, D82, F12, F13, H77, Q28. **KW** Environmental Policy. Harmonization. Minimum Standards.

AB This paper is concerned with the role of a supra-national agency, such as the European Commission, say, in influencing environmental policies set by national governments. In this paper I set out the simplest model in which environmental dumping occurs and show, not surprisingly, that harmonization will not produce a Pareto improvement on the non-cooperative outcome if countries are sufficiently different with respect to environmental damage costs. I also show that minimum standards may not produce a Pareto improvement either if environmental policy instruments are strategic substitutes, and there may be a limited scope for improvement on the non-cooperative outcome if they are strategic complements. This leaves the question why a supra-national agency does not just impose a cooperative solution which Pareto dominates the non-cooperative outcome. The reason explored in this paper is that the supra-national agency may be less well informed about national environmental damage costs than national governments. I derive the non-cooperative and cooperative equilibria with asymmetric information, and show that the cooperative equilibrium with asymmetric information sets environmental policies for countries with different environmental damage costs which are more similar than would be the case with full information. However this narrowing of the differences in environmental policies across countries with different damage costs falls well short of harmonization, so asymmetries of information provide no basis for policies such as harmonization.

Valentinyi, Akos
TI Diversity and Development. **AU** Herrendorf, Berthold; Valentinyi, Akos; Waldmann, Robert.

Valimaki, Juuso
TI Market Diffusion with Two-Sided Learning. **AU** Bergemann, Dirk; Valimaki, Juuso.

Van Reenen, John
TI Technology and Changes in Skill Structure: Evidence From an International Panel of Industries. **AU** Machin, Stephen; Ryan, Annette; Van Reenen, John.

Vannini, Stefano
TI To be (Unionized) or Not to be? A Case for Cost-Raising Strategies. **AU** Bughin, Jacques; Vannini, Stefano.

Vassilatos, Vanghelis
TI A Stochastic Dynamic General Equilibrium Model for Greece. **AU** Kollintzas, Tryphon; Vassilatos, Vanghelis.

Venables, Anthony J.
TI Trading Arrangements and Industrial Development. **AU** Puga, Diego; Venables, Anthony J.

Ventura, Jaume
TI Current Accounts in Debtor and Creditor Countries. **AU** Kraay, Aart; Ventura, Jaume.

TI The Leontiev-Trefler Hypothesis and Factor Price Insensitivity. **AU** Repetto, Andrea; Ventura, Jaume.

Ventura, L.
TI Asset Markets and Investment Decisions. **AU** De Waegenaere, A.; Polemarchakis, H. M.; Ventura, L.

Vincent, Daniel R.
TI The Optimal Timing of Procurement Decisions and Patent Allocations. **AU** Perry, Motty; Vincent, Daniel R.

Wadsworth, Jonathan
TI It Takes Two: Employment Polarisation in the OECD. **AU** Gregg, P.; Wadsworth, Jonathan.

TI The Price is Right: Inflation and Nominal Wage Adjustment in Britain. **AU** Brown, Donna; Ingram, Peter; Wadsworth, Jonathan.

TI Free to Choose? Dimensions of Private Sector Wage Contract Re- Negotiation Since 1979. **AU** Ingram, Peter; Wadsworth, Jonathan; Brown, Donna.

Waldfogel, Joel
TI A Citation-Based Test for Discrimination at Economics and Finance Journals. **AU** Smart, Scott; Waldfogel, Joel

Waldmann, Robert
TI Diversity and Development. **AU** Herrendorf, Berthold; Valentinyi, Akos; Waldmann, Robert.

Wang, Ping
TI Educational Choice, Credit Constraints and Public Policy in an Overlapping Generations Framework. **AU** Fender, John; Wang, Ping.

Warner, Andrew M.
TI Natural Resource Abundance and Economic Growth. **AU** Sachs, Jeffrey D.; Warner, Andrew M.

TI Trends in Regional Inequality in China. **AU** Jian, Tinalun; Sachs, Jeffrey D.; Warner, Andrew M.

Watson, Mark W.
TI How Precise Are Estimates of the Natural Rate of Unemployment? **AU** Staiger, Douglas; Stock, James H.; Watson, Mark W.

Watts, Alison
TI Two Versions of the Tragedy of the Commons. **AU** Moulin, Herve; Watts, Alison.

Wehbeh, Hassan
TI The Effect of Maternal Drug Use on Birth Weight: Measurement Error in Binary Variables. **AU** Kaestner, Robert; Joyce, Theodore; Wehbeh, Hassan.

Wei, Shang-Jin
TI Regional Trading Arrangements: Natural or Super-Natural? **AU** Frankel, Jeffrey A.; Stein, Ernesto; Wei, Shang-Jin.

West, Kenneth D.
PD March 1995. **TI** A Comparison of Alternative Instrumental Variables Estimators of a Dynamic Linear Model. **AU** West, Kenneth D.; Wilcox, David W. **AA** West:

University of Wisconsin and National Bureau of Economic Research. Wilcox: Board of Governors of the Federal Reserve System. **SR** National Bureau of Economic Research Technical Paper: 176; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C22, C52. **KW** Instrumental Variables. Dynamic Linear Equation.

AB Using a dynamic linear equation that has a conditionally homoskedastic moving average disturbance, we compare two parameterizations of a commonly used instrumental variables estimator (Hansen (1982)) to one that is asymptotically optimal in a class of estimators that includes the conventional one (Hansen (1985)). We find that for some plausible data generating processes, the optimal one is distinctly more efficient asymptotically. Simulations indicate that in samples of size typically available, asymptotic theory describes the distribution of the parameter estimates reasonably well, but that test statistics sometimes are poorly sized.

PD July 1995. **TI** Another Heteroskedasticity and Autocorrelation Consistent Covariance Matrix Estimator. **AA** University of Wisconsin and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 183; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** C20. **KW** Covariance Matrix.

AB A square root of T consistent estimator of a heteroskedasticity and autocorrelation consistent covariance matrix estimator is proposed and evaluated. The relevant applications are ones in which the regression disturbance follows a moving average process of known order. In a system of l equations, this "MA-l" estimator entails estimation of the moving average coefficients of an l-dimensional vector. Simulations indicate that the MA-l Estimator's finite sample performance is better than that of the estimators of Andrews and Monahan (1992) and Newey and West (1994) when cross-products of instruments and disturbances are sharply negatively autocorrelated, comparable or slightly worse otherwise.

Whang, Yoon-Jae

TI The Limiting Behavior of Kernel Estimates of the Lyapunov Exponent for Stochastic Times Series. **AU** Linton, Oliver B.; Whang, Yoon-Jae.

Wheelock, David

PD June 1994. **TI** Productivity Changes in U.S. Banking: 1984-93. **AU** Wheelock, David; Wilson, Paul. **AA** Wheelock: Federal Reserve Bank of St. Louis. Wilson: University of Texas at Austin. **SR** Federal Reserve Bank of St. Louis Working Paper: 94/021A; Research Division, Working Papers, Federal Reserve Bank of St. Louis, P.O. Box 442, St. Louis, MO 63166. Website: www.stls.frb.org. **PG** 30. **PR** no charge. **JE** C60, G21, L84. **KW** Banks. Productivity. Efficiency. Technical Change. Data Envelopment Analysis.

AB This paper uses a large sample of banks of all sizes to examine productivity changes in the U.S. banking industry during 1984-93. We use distance function estimates to compute Malmquist indices of productivity change, which we decompose into indices of changes in efficiency and changes in technology. We find that banks with assets exceeding $300 million became more productive on average, while those with under $300 million of assets became less productive on average. In most years, banks in all size ranges experienced technical progress, but, on average, declines in technical offset the effects of technical progress to produce declines in productivity, especially for small banks.

Wilcox, David W.

TI A Comparison of Alternative Instrumental Variables Estimators of a Dynamic Linear Model. **AU** West, Kenneth D.; Wilcox, David W.

TI Generating Non-Standard Multivariate Distributions with an Application to Mismeasurement in the CPI. **AU** Shapiro, Matthew D.; Wilcox, David W.

Wilkinson, Frank

TI Trust, Business Relationships and the Contractual Environment. **AU** Burchell, Brendan; Wilkinson, Frank.

PD September 1996. **TI** Economic Functioning, Self-Sufficiency and Full Employment. **AU** Wilkinson, Frank; Tarling, Roger. **AA** Wilkinson: University of Cambridge. Tarling: Cambridge Policy Consultants. **SR** University of Cambridge ESRC Centre for Business Research Working Papers: WP43; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **PG** 28. **PR** $10.00 (5 pounds); checks payable to University of Cambridge. **JE** D60, H50, J41, J64. **KW** Employment Policy. Keynesianism. Labor Market Segmentation. Unemployment. Social Exclusion.

AB Sustainable full employment requires individual self-sufficiency, which depends on social and economic inequality. Keynesian and welfare state policies promoted equality but monetarism and labor market deregulation reversed this tendency. Increasing joblessness, social exclusion, low wages and welfare cuts have triggered a spiral of declining self-sufficiency and unsustainable budget deficits, and the economy is caught in a low employment trap. Conventional economic wisdom blames economic and social deprivation on the victim and asserts that government intervention to reverse the economic and social decline will merely trigger inflation. Economic re-education is therefore a necessary prelude to economic and social re-generation.

Williamson, Jeffrey G.

TI Around the European Periphery 1870-1913: Globalization, Schooling and Growth. **AU** O'Rourke, Kevin H.; Williamson, Jeffrey G.

Wilson, Paul

TI Productivity Changes in U.S. Banking: 1984-93. **AU** Wheelock, David; Wilson, Paul.

Winter-Ebmer, Rudolf

PD December 1996. **TI** Benefit Duration and Unemployment Entry: Quasi-Experimental Evidence for Austria. **AA** Universitat Linz. **SR** Centre for Economic Policy Research, Discussion Paper: 1521; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 18. **PR** 4 pounds or $8.00. **JE** J14, J41, J64, J65. **KW** Unemployment Insurance. Unemployment Entry. Implicit Contracts. Elderly Workers.

AB This paper studies the impact of a selective extension of unemployment benefit duration on the incidence of unemployment in Austria. As the new law applies only to elderly workers in certain regions of the country after June 1988, a quasi-experimental situation is created. Unemployment entry is found to rise by between four and eleven percentage points due to the new law. The findings are explained by a breach of an implicit contract; elderly workers receive wages above their marginal product in order to elicit higher effort. Dismissal of elderly workers is now easier because more generous unemployment insurance makes reputation loss for the firm less severe.

PD December 1996. **TI** Potential Unemployment Benefit Duration and Spell Length: Lessons From a Quasi-Experiment in Austria. **AA** Universitat Linz. **SR** Centre for Economic Policy Research Discussion Paper: 1534; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 11. **PR** 4 pounds or $8.00. **JE** J14, J41, J65, J68. **KW** Unemployment Duration. Unemployment Benefits.

AB The paper studies the effect of potential unemployment benefit duration on the length of unemployment spells in Austria. It takes advantage of a quasi-experimental situation, where potential benefit duration was extended in 1988 for elderly workers living in specific regions of the country. The empirical analysis shows that men react significantly to benefit duration whereas women generally do not. The quantitative impact is smaller than in comparable studies for the Germany and the United States. Furthermore, the impact of extended benefit duration is differentiated for short and long spells. Whereas for long spells higher impacts for men as well as for women are found, no unemployment-prolonging effects for short spells could be detected.

Winters, L. Alan

PD November 1996. **TI** Regionalism Versus Multilateralism. **AA** The World Bank. **SR** Centre for Economic Policy Research, Discussion Paper: 1525; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 31. **PR** 4 pounds or $8.00. **JE** F13, F15. **KW** Regional Integration. Multilateral Trading. European Integration.

AB This paper examines the theoretical arguments and historical evidence about whether regionalism undermines the multilateral trading system. It first considers how to define multilateralism and then surveys over 60 recent contributions to the literature. It classifies theoretical models by four criteria: their assumed objective functions (national welfare versus pressure group interests); symmetric versus asymmetric models; one-off versus repeated games; and how they determine post-integration policies. It finds significant theoretical arguments and historical evidence on both sides of the debate. Very tentative conclusions include that regionalism may: help to liberalize very restrictive trade regimes; increase the vulnerability of less restrictive ones to break down; and be more likely to be harmful if governments are subject to sector-specific lobbying forces.

Winters, Paul

PD April 1997. **TI** The Role of Agriculture in Economic Development: Visible and Invisible Surplus Transfers. **AU** Winters, Paul; de Janvry, Alain; Sadoulet, Elisabeth; Stamoulis, Kostas. **AA** Winters: International Potato Center. De Janvry and Sadoulet: University of California, Berkeley. Stamoulis: FAO. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE), Working Paper: 814; 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** 25 cents per page domestic; 50 cents per page foreign. **JE** O10, Q10. **KW** Agriculture. Economic Development. Social Accounting Matrix. Computable General Equilibrium Model. Agricultural Productivity.

AB The financial surplus of agriculture has been central to theories of the role of agriculture in economic development. Morrisson and Thorbecke (MT) have used a constant-price social accounting matrix (SAM) framework to rigorously measure the financial surplus of agriculture and decompose the mechanisms of surplus extraction. History and theory have, however, stressed the role of prices as an invisible transfer mechanism in addition to the visible transfers identified in the SAM framework. We extend the MT approach by defining and measuring the real surplus of agriculture and decomposing the mechanisms of surplus extraction between visible and invisible financial transfers. Using an archetype computable general equilibrium model for poor African nations, we trace the generation, transfer, and use of an agricultural surplus created by a productivity gain in agriculture. This shows that prices indeed play an overwhelmingly important role in transferring a surplus from agriculture to the benefit of the rest of the economy.

Witte, Ann Dryden

TI Sampling Errors and Confidence Intervals for Order Statistics: Implementing the Family Support Act. **AU** Horrace, William C.; Schmidt, Peter; Witte, Ann Dryden.

Wood, Eric

TI Innovation in UK SMEs: Causes and the Consequences for Firm Failure and Acquisition. **AU** Cosh, Andy; Hughes, Alan; Wood, Eric.

Wright, Jonathan

TI Asymptotics for GMM Estimators with Weak Instruments. **AU** Stock, James H.; Wright, Jonathan.

Xu, C.

TI The Rise of China as an Economic Power. **AU** Goodhart, Charles; Xu, C.

Xu, Yexiao

TI The Structure of Stock Market Volatility. **AU** Malkiel, Burton G.; Xu, Yexiao.

PD December 1995. **TI** A Model for the Pricing of Closed-End Funds. **AA** Princeton University. **SR** Princeton Financial Research Center Memorandum: 155; Financial Research Center, Princeton University, Department of Economics, Princeton, NJ 08544-1021. **PG** 28. **PR** $3 (domestic mailing), $6 (foreign mailing); make check payable to Princeton University. **JE** G12. **KW** Closed-End Funds.

AB This paper presents a general dynamic equilibrium model as well as a related static model to study the discount phenomenon in the pricing of most closed-end fund shares. We assume that an investor cannot invest in all the underlying securities of a closed-end fund and there is stochastic turnover of the fund's underlying securities. Our model suggests that the discount on closed-end funds be likely to increase when (1) the turnover process becomes more persistent, (2) the percentage of restricted stocks held by the fund increases, (3) the volatility of the dividend stream of the underlying securities increases, and (4) investors become more risk averse. Furthermore, the model is also consistent with many time series properties of closed-end funds, for example, the current premium tends to be negatively correlated with future return and the closed-end fund's return seems to be more volatile than its underlying assets.

Yan, Xiaoyi

TI International R&D Spillovers Between Canadian and Japanese Industries. **AU** Bernstein, Jeffrey I.; Yan, Xiaoyi.

Yang, Dennis Tao

PD September 1995. **TI** Education and Off-Farm Work. **AA** Duke University. **SR** Duke University, Department of Economics, Working Paper: 95/09; available only on web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 22. **PR** no charge. **JE** J22, J24. **KW** Time Allocation. Off-Farm Work. China.

AB A household time allocation model is developed to explain the empirical regularity that the better educated farm members are usually the first to participate in nonfarm employment. Central to the model is the comparative advantage principle and a knowledge spillover hypothesis that workers who participate in off-farm work may still contribute knowledge to farm management. Using Chinese farm data, it is found that (a) schooling does not contribute to physical efficiency in farming, and (b) the highest household schooling contributes the most to allocative efficiency and yet the contribution is not affected by off-farm participation, and (c) education raises off-farm wages. The model's implications from these results are consistent with the observed patterns of time allocation.

Yeldan, Erinc

PD April 1995. **TI** Political Economy Perspectives on the 1994 Turkish Economic Crisis: A CGE Modeling Analysis. **AA** Bilkent University. **SR** University of Minnesota Economic Development Center Bulletin: 95/03; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 52. **PR** no charge. **JE** C68, O11, O53. **KW** Turkey. Computable General Equilibrium Modeling. Structuralist.

AB This paper investigates the role of the deterioration of the Turkish public sector balances in the latter half of the 1980's and the evolution of the economic crisis with the aid of a computable general equilibrium model. The theoretical basis of the model utilized in the paper rests upon the Walrasian and the Structuralist/Keynesian macro foundations. The distinguishing feature of the model is that, it accommodates monopolistic mark-up pricing rules in the industrial sectors, and endogenously solves for capacity utilization and unemployment level through Keynesian mechanisms of effective final demand. The model investigates the evolution of the crisis under three main headings: (i) the role of the financial crisis and the unprecedented deficit in the public sector balances; (ii) the roles of the foreign borrowing strategy of the state and the short term foreign capital inflows on balance of payments and the foreign exchange rate; and (iii) the role of the political-economic relations of income distribution and inflationary processes emanating from real wage increases and non-competitive pricing behavior in the industrial sectors. The general equilibrium results of the model underscore the importance of intra-class relations of income distribution and conflict in the evolution of price movements in the Turkish economy.

TI A Dynamic CGE Model: An Application of R&D-Based Endogenous Growth Model Theory. **AU** Diao, Xinshen; Elbasha, Elamin H.; Roe, Terry L.; Yeldan, Erinc.

Yuen, Chi-Wa

TI Labor Mobility and Fiscal Coordination. **AU** Razin, Assaf; Yuen, Chi-Wa.

Yuying An, Mark

PD November 1995. **TI** Log-Concave Probability Distributions: Theory and Statistical Testing. **AA** Duke University. **SR** Duke University, Department of Economics, Working Paper: 95/03; available only on web site: www.econ.duke.edu/Papers/wpindex.html. **PG** 25. **PR** no charge. **JE** C12, C14, D80. **KW** Log-Concave Distributions. Hazard Rate. Non-Parametric Testing. U-Statistic.

AB This paper studies the broad class of log-concave probability distributions that arise in economics of uncertainty and information. For univariate, continuous, and log-concave random variables we prove useful properties without imposing differentiability of density functions. Discrete and multivariate distributions are also discussed. We propose simple non-parametric testing procedures for log-concavity. The test statistics are constructed to test one of the two implications of log-concavity: increasing hazard rates and new-is-better-than-used (NBU) property. The tests for increasing hazard rates are based on sample information of the normalized spacing of the order statistics. The tests for NBU property fall into the category of Hoeffding's U- statistics.

Zeckhauser, Richard

TI Hedging and Gambling: Corporate Risk Choice When Informing the Market. **AU** Degeorge, Francois; Moselle, Boaz; Zeckhauser, Richard.

Zhang, Junsen

TI The Effects of Gender Control on Fertility and Children's Consumption. **AU** Davies, James B.; Zhang, Junsen.

Zhang, Lei

TI Hyperinflation and Stabilization: Cagan Revisited. **AU** Miller, Marcus H.; Zhang, Lei.

Zilberman, David

TI Learning, Forgetting, and the Diffusion Process of Food and Agricultural Products. **AU** Heiman, Amir; Zilberman, David.

TI Modeling Money-Back Guarantees As Options. **AU** Heiman, Amir; Zilberman, David.

TI The Economics of Demonstration. **AU** Heiman, Amir; Zilberman, David.

Zilibotti, Fabrizio

TI Setting Standards: Information Accumulation in

Development. **AU** Acemoglu, Daron; Zilibotti, Fabrizio.

Zimmermann, Klaus F.

TI Unemployment and Wages of Ethnic Germans. **AU** Bauer, Thomas; Zimmermann, Klaus F.

PD November 1996. **TI** Economic Incentives and Hospitalization in Germany. **AU** Zimmermann, Klaus F.; Geil, Peter; Million, Andreas; Rotte, Ralph. **AA** Universitat Munchen. **SR** Centre for Economic Policy Research, Discussion Paper: 1516; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 25. **PR** 4 pounds or $8.00. **JE** C23, F22, I11, I18, I21. **KW** Health Care. Hospital Trips. Migration. Germany.

AB The determinants of the dramatically rising expenditures on health care in general, and on hospital care in particular, have been of prior concern to policy and to research. Using a rich panel data set this paper contributes to this literature by investigating factors determining the demand for hospitalization in Germany. While most previous studies have found a significant impact of social insurance on the demand for hospital trips, the empirical results presented here cast doubts on the propelling role of those economic incentives in the German case. There are also important differences in the hospitalization behavior of men and women and between the full sample and those who are chronically ill, which have been neglected by the literature. The analysis relies on various count data models including Poisson, NEGBIN, ZIP (tau), hurdle Poisson and NEGBIN panel models, and the findings are rather robust.

Zingales, Luigi

TI Capital Structure Choice When Managers are in Control: Entrenchment Versus Efficiency. **AU** Novaes, Walter; Zingales, Luigi.

TI The Tyranny of the Inefficient: An Enquiry Into the Adverse Consequences of Power Struggles. **AU** Rajan, Raghuram G.; Zingales, Luigi.

Zoega, Gylfi

TI Quitting Externalities With Uncertainty About Future Productivity. **AU** Booth, Alison L.; Zoega, Gylfi.