ABSTRACTS OF WORKING PAPERS IN ECONOMICS

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Aassve, Amstein
TI "I Vont To Be Alone" Transitions to Independent Living, Marriage and Divorce Among Young Americans. AU Burgess, Simon; Propper, Carol; Aassve, Amstein.

Abadie, Alberto
PD March 1998. TI Instrumental Variables Estimation of Quantile Treatment Effects. AU Abadie, Alberto; Angrist, Joshua D.; Imbens, Guido W. AA Abadie: Massachusetts Institute of Technology. Angrist: Massachusetts Institute of Technology and National Bureau of Economic Research. Imbens: University of California, Los Angeles and National Bureau of Economic Research. SR National Bureau of Economic Research Technical Paper: 229; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE C13, C14, C31, J13. KW Instrumental Variables. Binary Treatment. Quantiles. Children. Income Distribution.
AB This paper introduces an instrumental variables estimator for the effect of a binary treatment on the quantiles of potential outcomes. The quantile treatment effects (QTE) estimator accommodates exogenous covariates and reduces to quantile regression as a special case when treatment status is exogenous. Asymptotic distribution theory and computational methods are derived. QTE minimizes a piecewise linear objective function for which a local minimum can be obtained using a modified Barrodale-Roberts algorithm. The QTE estimator is illustrated by estimating the effect of childbearing on the distribution of family income.

Abbring, Jaap H.
PD October 1997. TI Business Cycles and Compositional Variation in U.S. Unemployment. AU Abbring, Jaap H.; van den Berg, Gerard J.; van Ours, Jan C. AA Abbring: University of Amsterdam. van den Berg: Free University of Amsterdam. van Ours: Tinbergen Institute. SR Centre for Economic Policy Research, Discussion Paper: 1702; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 48. PR 5 pounds or $10.00. JE C41, E32, J64. KW Unemployment Composition. Unemployment Duration. Business Cycle. Sorting Ranking.
AB In the past decades several features of US unemployment dynamics have been investigated empirically. The original focus of research was on the duration of unemployment. In later studies the cyclicality of incidence and duration, compositional effects and duration dependence of the exit rate out of unemployment have been investigated. Unlike the partial approach of previous studies this paper takes all elements of unemployment dynamics simultaneously into account. We find that cyclical fluctuations in unemployment are driven by variations in the incidence, individual exit probabilities and the composition of the inflow into unemployment. We also find negative duration dependence of the unemployment exit rate, which can be attributed to employers ranking workers according to the length of their unemployment spell.

Abowd, John M.
PD August 1997. TI Moment Estimation with Attrition. AU Abowd, John M.; Kramarz, Francis; Crepon, Bruno. AA Abowd: Cornell University and National Bureau of Economic Research. Kramarz and Crepon: CREST/INSEE. SR National Bureau of Economic Research Technical Paper: 214; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE C13, C33, D21, J23. KW Labor Studies. Panel Data. GMM. Attrition.
AB The authors present a method that accommodates missing data in longitudinal datasets of the type usually encountered in economic and social applications. The technique uses various extensions of "missing at random" assumptions that they customize for dynamic models. Their method, applicable to longitudinal data on persons or firms, is implemented using the Generalized Method of Moments with reweighting that appropriately corrects for the attrition bias caused by the missing data. The authors apply the method to the estimation of dynamic labor demand models. The results demonstrate that the correction is extremely important.

Acemoglu, Daron
PD October 1997. TI Why Do New Technologies Complement Skills? Directed Technical Change and Wage Inequality. AA Massachusetts Institute of Technology. SR Centre for Economic Policy Research, Discussion Paper: 1707; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 48. PR 5 pounds or $10.00. JE J31, O14, O33. KW Technical Change. Relative Supply of Skill. Returns to Education. Skill-Biased Technological Change. Wage Inequality.
AB This paper considers an economy where skilled and unskilled workers use different technologies. The rate of improvement of each technology is determined by a profit-maximizing R&D sector. When there is a high proportion of skilled workers in the labor-force, the market for skill-complementary technologies is larger and more effort will be spent in upgrading the productivity of skilled workers. An implication of this theory is that when the relative supply of

skilled workers increases exogenously, the skill premium decreases in the short run, but then increases, possibly even above its initial value, because the larger market for skill-complementary technologies has changed the direction of technical change. This suggests that the rapid increase in the proportion of college graduates in the U.S. labor-force may have been causal in both the decline in the college premium during the 1970s and the large increase in inequality during the 1980s. The paper also derives implications of directed technical change for residual wage inequality and shows that calculations of the impact of international trade on inequality that ignore the change in the direction of technical progress may be misleading.

PD October 1997. TI The Labour Market and Corporate Structure. AU Acemoglu, Daron; Newman, Andrew F. AA Acemoglu: Massachusetts Institute of Technology. Newman: Columbia University. SR Centre for Economic Policy Research, Discussion Paper: 1708; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 48. PR 5 pounds or $10.00. JE J41, L23. KW Corporate Structure. Efficiency Wages. Labor Market Regulation. Monitoring. Moral Hazard.
AB This paper analyses the impact of labor demand and labor market regulations on the corporate structure of firms. It finds 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 the broad trends in the data. The paper also finds 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 only by a small amount even though they reduce employment.

Acquisti, Alessandro
TI Grime and Punishment: Job Insecurity and Wage Arrears in the Russian Federation. AU Lehmann, Hartmut; Wadsworth, Jonathan; Acquisti, Alessandro.

Adam, Paula
PD March 1998. TI Partial De-Regulation: Fixed-Term Contracts in Italy and Spain. AU Adam, Paula; Canziani, Paula. AA Adam: OECD and Centre for Economic Policy Research. Canziani: Centre for Economic Performance and London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 386; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 38. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE J22, J23, J31, J41, J68. KW Unemployment. Deregulation. Contracts. Spain. Italy.
AB To combat unemployment, in the 1980's most European countries began to de-regulate labor markets. In 1984, atypical contracts were introduced in Italy and Spain. Although the Italian and Spanish economies are widely comparable, and the labor market reforms introduced in the mid-1980's appear similar, the consequences of these reforms have been very different. The unprecedented growth of temporary contracts in the last ten years in Spain has given rise to an extensive

theoretical and empirical literature. In Italy, however, the utilization of atypical contracts has remained limited and much less investigated. This paper has two goals. First it analyses the characteristics of fixed-term contracts in Italy and Spain. Then it investigates the causes that made the Italian and Spanish experience with these contracts so different.

Adams, James D.
PD February 1997. TI Technology, Trade, and Wages. AA University of Florida and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5940; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 46. PR $5.00. JE F10, J30, L30, O30. KW Labor Studies. Productivity.
AB Considerable effort has been devoted in recent years to the description of wage structure. This research has documented a rising return to education, unobserved skill, and work experience. However, there appears to be little research into causes of the change in structure. This paper seeks to fill the gap by studying the impact of domestic technology, foreign technology, and trade on U.S. wages. A standard model of general equilibrium is presented that shows each effect tends to be opposite in sign for high and low skilled labor. We then modify the model to allow for accumulation of sector-specific skills and sectoral immobility. In this version shocks have the same direction of effect on high and low skilled workers. In the empirical work we devise measures of foreign and domestic R&D inputs for six sectors of the private U.S. economy, and of R&D outputs for twenty-four manufacturing industries. Holding time and industry effects constant we find that: (i), in most cases technology has the same rather than opposite effect on wages at both skill levels; (ii), a rise in the foreign share in world innovation or U.S. patents decreased U.S. wages; (iii), an increase in the U.S. share in world innovation or U.S. patents raises U.S. wages, especially for the less skilled; and (iv), the stock of world innovation and U.S. patents decreases real wages, especially for the less skilled.

Ait-Sahalia, Yacine
PD February 1998. TI Maximum Likelihood Estimation of Discretely Sampled Diffusions: A Closed-Form Approach. AA University of Chicago and National Bureau of Economic Research. SR National Bureau of Economic Research Technical Paper: 222; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE C13, C22, G12. KW Diffusion. Likelihood Functions. Finance. Discrete Samples. Derivatives.
AB When a continuous-time diffusion is observed only at discrete dates, not necessarily close together, the likelihood function of the observations is in most cases not explicitly computable. Researchers have relied on simulations of sample paths in between the observation points, or numerical solutions of partial differential equations, to obtain estimates of the function to be maximized. By contrast, the authors construct a sequence of fully explicit functions which they show converge under very general conditions, including non-ergodicity, to the true (but unknown) likelihood function of the discretely-sampled diffusion. The authors document that the rate of convergence of the sequence is extremely fast for a number of examples relevant in finance. They then show that maximizing the sequence instead of the true function results in an estimator

which converges to the true maximum-likelihood estimator and shares its asymptotic properties of consistency, asymptotic normality and efficiency.

Aizenman, Joshua

AB This paper revisits the Home Bias Puzzle -- the relatively low international diversification of portfolios. We suggest that part of the diversification puzzle may be due to reliance on the conventional CAPM model as the benchmark predicting patterns of diversification. We compare the asset diversification patterns of agents who maximize a generalized expected utility (GEU) to the diversification of agents who maximize the conventional expected utility (EU). Specifically, we derive the patterns of diversification for agents who maximize a "rank-dependent" expected utility, attaching more weight to "bad" than to "good" outcomes, in contrast to the probability weights used in a conventional expected utility maximization. We show that agents who maximize a GEU exhibit first order risk aversion and tend to refrain from diversification in contrast to the diversification of agents who maximize the EU. For a given covariance structure we identify a " cone of diversification" -- the range of domestic and foreign yields leading to a positive demand for both equities. Greater downside risk aversion increased the threshold of yields leading to diversification, shifting the cone of diversification upwards and rightwards. Thus, greater downside risk aversion narrows the range of foreign yields leading to diversification for a given domestic yield.

Al-Najjar, Nabil I.

AB A player influences a collective outcome if his actions can change the probability of that outcome. He is a-pivotal if this change exceeds some threshold a. The authors study influence in general environments with N players and arbitrary sets of signals. It is shown that influence is maximized when players' signals are identically distributed and the outcome is determined according to simple majority rule. This leads to the surprising conclusion that majority rules already contain the maximal number of pivotal players. The authors derive a tight bound on average influence, as well as a tight bound on the number of a-pivotal players. This analysis is relevant to problems where players' influence is a key consideration in determining their strategic behavior. The applications considered include the problem of designing a mechanism for the provision of public goods in the spirit of Mailath and Postlewaite (1990), partnership games, games with production complementarities.

Alogoskoufis, George

AB The European Union will enter Stage Three of Economic and Monetary Union (EMU) in 1999. The development of euro financial markets and thickness externalities in the use of the euro as means of payment will be the major factors determining the importance of the euro as an international currency . As euro securities markets become deeper and more liquid and transaction costs fall, euro assets will become more attractive, and the use of the euro as a vehicle currency will expand; the two effects interact, as we demonstrate. We use a three-region world model as a framework for alternative steady-state scenarios. With forex and securities market data, we assess the plausibility of those scenarios and the implications for economic efficiency (welfare). We find that the euro may take on some of the current roles of the dollar, but the extent to which it does will depend on policy decisions and on the beliefs of market participants. The welfare analysis reveals potential quantitatively significant benefits for the euro area, at the cost of the United States and (to a lesser degree) Japan. During the transition to the new equilibrium, the main effect of the introduction of the euro will come through portfolio shifts that are likely to favor an appreciation of the new currency vis-a-vis the dollar (and the yen).

AB See the abstract for Alogoskoufis, George; Portes, Richard; and Rey, Helene. October 1997, "The Emergence of the Euro as an International Currency". Centre for Economic Policy Research, Discussion Paper: 1741; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.cepr.demon.co.uk.

Anderson, James E.

in Some Distorted Agricultural Economies. **AA** Boston College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5923; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** $5.00. **JE** F13, F14, O13, O20. **KW** International Trade. Investment.

AB There is widespread concern that the Uruguay Round may reduce the welfare of developing countries through its effect on world agricultural prices. Reduced agricultural price distortions among major supplying nations are predicted to increase basic food prices and decrease some important export prices such as those for coffee and cotton. It appears that raising food prices paid by food importers must be bad for them, while reducing world coffee and cotton prices appears bad for exporters of those products. Appearances may be deceiving, however, since theory shows that a distortion effect operates alongside the standard terms of trade effect. I report here distortion effects which are many times larger than terms of trade effects in an analysis of the Uruguay Round's impact on 9 agricultural economies. I deploy a simple Computable General Equilibrium model. The 9 developing economies are distorted by domestic agricultural distortions in 15 markets, along with hundreds of 4 digit nonagricultural tariffs and quotas. In 3 of 9 countries, the distortion effect reverses the impact of the terms of trade effect. In 2 other countries the distortion effect raises a trivial terms of trade effect up to around 1% of national income.

Anderson, Kym

PD October 1997. **TI** Reducing Coal Subsidies and Trade Barriers: Their Contribution to Greenhouse Gas Abatement. **AU** Anderson, Kym; McKibbin, Warwick J. **AA** Anderson: University of Adelaide. McKibbin: Australian National University. **SR** Centre for Economic Policy Research, Discussion Paper: 1698; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 40. **PR** 5 pounds or $10.00. **JE** D58, F13, F17, H20, Q40. **KW** Coal Subsidies. Trade. Environment. Carbon Emissions. Global Warming. Greenhouse Gases.

AB International negotiations for an agreement to reduce the emission of greenhouse gases are unlikely to produce concrete and comprehensive policies for effective emission reductions in the near term, not least because the policy measures being considered are economically very costly to major industries in rich countries and are unlikely to prevent "leakage" through a re-location of carbon-intensive activities to poorer countries. An alternative or supplementary approach that is more likely to achieve carbon and methane emission reductions, and at the same time generate national and global economic benefits rather than costs, involves lowering coal subsidies and trade barriers. Past coal policies which encouraged excessive production of coal in a number of industrial countries and excessive coal consumption in numerous developing and transition economies are currently under review and in some cases are being reformed. This paper documents those distortions and outlines the circumstances under which their reform could not only improve the economy but also lower greenhouse gas emissions globally. It also provides modeling results which quantify the orders of magnitudes that could be involved in reducing those distortions. The effects on economic activity as well as global carbon emissions are examined using the G- Cubed multi-country general equilibrium model of the

world economy.

Angrist, Joshua D.

TI Instrumental Variables Estimation of Quantile Treatment Effects. **AU** Abadie, Alberto; Angrist, Joshua D.; Imbens, Guido W.

Artis, Michael J.

PD August 1997. **TI** The Stability Pact: Safeguarding the Credibility of the European Central Bank. **AU** Artis, Michael J.; Winkler, Bernhard. **AA** Artis: European University Institute. Winkler: Deutsche Bundesbank. **SR** Centre for Economic Policy Research, Discussion Paper: 1688; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 76. **PR** 5 pounds or $10.00. **JE** E58, E61, F33, F36, F42. **KW** Monetary Union. Maastricht Treaty. Incentive Contracts. Policy Coordination.

AB The 'Stability Pact' agreed at the Dublin Summit in December 1996 and concluded at the Amsterdam European Council in June 1997 prescribes sanctions for countries that breach the Maastricht deficit ceiling in stage three of European Monetary Union. This paper explores possible motivations for the Stability Pact as an incentive device for fiscal discipline and as a partial substitute for policy coordination and a common 'stability culture'.

PD August 1997. **TI** On Identifying the Core of EMU: An Exploration of Some Empirical Criteria. **AU** Artis, Michael J.; Zhang, Wenda. **AA** Artis: European University Institute. Zhang: Manchester Metropolitan University. **SR** Centre for Economic Policy Research, Discussion Paper: 1689; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 40. **PR** 5 pounds or $10.00. **JE** C14, E32, F15, F31. **KW** Business Cycles. Exchange Rates. ERM. Cluster Analysis.

AB The paper reports strikingly high correlation's of the cyclical components of industrial production between the participant countries in the ERM. Supplementing these correlation's with criteria based on real exchange rate volatility, trade and monetary policy conformity, cluster analysis is used to identify a core group of countries for which monetary union with Germany seems less controversial and to define other groups for which monetary union might be less advisable.

Asea, Patrick K.

PD March 1997. **TI** Heterogeneous Information Arrival and Option Pricing. **AU** Asea, Patrick K.; Neube, Mthuli. **AA** Asea: University of California, Los Angeles and National Bureau of Economic Research. Neube: London School of Economics. **SR** National Bureau of Economic Research Working Paper: 5950; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 35. **PR** $5.00. **JE** D52, G13. **KW** Asset Pricing.

AB We model the arrival of heterogeneous information in a financial market as a doubly-stochastic Poisson process (DSPP). A DSPP is member of the family of Poisson Processes in which the mean value of the process itself is governed by a stochastic mechanism. We explore the implications for pricing stock, index and foreign currency options of the assumption that the underlying security evolves as a mixed diffusion DSPP.

We derive an intertemporal CAPM and demonstrate that accounting for heterogeneous information arrival may minimize the ubiquitous pricing bias -- "smile-effect" -- of standard option pricing models. We propose a conceptually simple but numerically intensive maximum likelihood estimator of the parameters of a DSPP. A simulation study verifies the adequacy of the asymptotic approximations in finite samples.

PD March 1997. **TI** Lending Cycles. **AU** Asea, Patrick K.; Blomberg, S. Brock. **AA** Asea: University of California, Los Angeles and National Bureau of Economic Research. Blomberg: Wellesley College. **SR** National Bureau of Economic Research Working Paper: 5951; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 42. **PR** $5.00. **JE** C33, E24, E32. **KW** Economic Fluctuations. Growth.
AB We investigate the lending behavior of banks by exploiting a rich panel dataset on the contract terms of approximately two million commercial and industrial loans granted by 580 banks between 1977-1993. Using a Markov switching panel model we demonstrate that banks change their lending standards -- from tightness to laxity -- systematically over the cycle. We then use an efficient minimum chi-square estimator to examine the relationship between the cyclical component of aggregate unemployment and bank lending standards when both variables are jointly endogenously determined in a system of simultaneous equations with mixed, continuous/discrete dependent variables. The patterns we uncover suggest that lax lending standards that tend to occur during expansions exert considerable influence on the dynamics of aggregate fluctuations.

PD May 1997. **TI** Time-To-Build and Cycles. **AU** Asea, Patrick K.; Zak, Paul J. **AA** Asea: University of California, Los Angeles and National Bureau of Economic Research. Zak: Claremont Graduate School. **SR** National Bureau of Economic Research Technical Paper: 211; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** $5.00. **JE** C61, E32, O41. **KW** International Finance. Macroeconomics. Growth. Business Cycles. Differential Equations.
AB The authors analyze the dynamics of a simple growth model in which production occurs with a delay while new capital is installed (time-to- build). The time-to-build technology is shown to yield a system of functional (delay) differential equations with a unique steady state. The authors demonstrate that the steady state, though typically a saddle, may exhibit Hopf cycles on a measurable set of the parameter space. Furthermore, the optimal path to the steady state is oscillatory. A counter-example to the claim that "models with a time-to-build technology are not intrinsically oscillatory" is provided. The authors also provide a primer on the central technical apparatus -- the mathematics of functional differential equations.

Ashenfelter, Orley
PD February 1997. **TI** Contract Form and Procurement Costs: The Impact of Compulsory Multiple Contractor Laws in Construction. **AU** Ashenfelter, Orley; Ashmore, David; Filer, Randall. **AA** Ashenfelter: Princeton University and National Bureau of Economic Research. Ashmore: Princeton University. Filer: Hunter College of CUNY. **SR** National Bureau of

Economic Research Working Paper: 5916; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 20. **PR** $5.00. **JE** K11, K42. **KW** Law. Economics.
AB It is claimed that many regulatory rules enforce inefficiencies in order to achieve the appearance of cost control. We assess the importance of these claims by measuring the effect of New York State's compulsory multiple contractor law on the cost of public construction in New York City. Multiple contractor laws, which exist in many states, prohibit the use of general contractors in order to promote the appearance of competition. Contrasts of construction costs between buildings with identical blind cost estimates indicate that this law increases public construction costs by 8% and increases construction delays by more than a calendar year.

Ashmore, David
TI Contract Form and Procurement Costs: The Impact of Compulsory Multiple Contractor Laws in Construction. **AU** Ashenfelter, Orley; Ashmore, David; Filer, Randall.

Atack, Jeremy
PD August 1997. **TI** Business Activity and the Boston Stock Market, 1835-1869. **AU** Atack, Jeremy; Rousseau, Peter L. **AA** Atack: Vanderbilt University and National Bureau of Economic Research. Rousseau: Vanderbilt University. **SR** National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 103; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** $5.00. **JE** G10, G21, N11, N21, N61. **KW** Economic History. American Economy. Stock Markets. Banking.
AB This paper examines the performance of the Boston stock market, the nation's premier market for industrials, between 1835 and 1869, developing new indexes of price performance, dividend yields and total holding period returns for bank stocks and industrial equities using annual data from Martin (1871). Using these new series and a set of VAR models the authors conclude that disturbances in the banking sector, as manifested by declines in total stockholder returns, led to increases in short-term lending rates which in turn led to declines in the price performance of traded manufacturing firms. There is no evidence of feedback from manufacturing returns to bank stock prices via lending rates. The findings are consistent with a key role for banks in nineteenth century business fluctuations.

Athanasoulis, Stefano
PD February 1997. **TI** The Significance of the Market Portfolio. **AU** Athanasoulis, Stefano; Shiller, Robert J. **AA** Athanasoulis: Iowa State University. Shiller: Yale University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 209; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** $5.00. **JE** G11, G13, G22. **KW** Asset Pricing. Market Portfolio. Contracts.
AB The market portfolio is in one sense the least important portfolio to provide to investors. In a J-agent one-period stochastic endowment economy, where preferences are quadratic, a social-welfare-minded contract designer would never create a contract that would allow trading the market portfolio. Even the complete set of contracts, all J-1 of them,

which achieve a first best solution, never span the market portfolio. These conclusions rely on the assumption that the contract designer has perfect information about agents' utilities. The authors also show that as the contract designer's information about agents' utilities becomes more imperfect the optimal contracts approach contracts that weight individual endowments in proportion to elements of eigenvectors of the variance matrix of endowments. Then, if there is a strong enough market component to endowments, a portfolio approximating the market portfolio may be the most important portfolio.

Atkeson, Andrew

PD April 1997. TI Industry Evolution and Transition: A Neoclassical Benchmark. AU Atkeson, Andrew; Kehoe, Patrick. AA University of Pennsylvania and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6005; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 30. PR $5.00. JE E13, F36, O04. KW Economic Fluctuations. Growth. International Finance. Macroeconomics.
AB Recently, a large number of countries have undertaken major reforms that have led to a large increase in the number of new enterprises. After these reforms, however, it has taken a number of years before output and productivity have begun to grow. The thesis of this paper is that the process of starting new enterprises is turbulent and time- consuming and as a result, it takes time before the benefits of reform show up in increases in measured output and productivity. To establish a neoclassical benchmark for reforming economies, we ask what the path of transition looks like in a reforming economy for which the process governing the growth of new enterprises looks like it does in the U.S., a well-functioning market economy. We find that it takes 5-7 years until measured output and productivity begin to grow rapidly following reform. This finding suggests that, even if all other aspects of the economy are perfect, the transition following economy-wide reforms should take a substantial amount of time.

Aturupane, Chonira

TI Determinants of Intra-Industry Trade Between East and West Europe. AU Djankov, Simeon; Hoekman, Bernard; Aturupane, Chonira.

Audretsch, David B.

PD October 1997. TI Sources of Growth: The Entrepreneurial Versus the Managed Economy. AU Audretsch, David B.; Thurik, A. Roy. AA Audretsch: Wissenschaftzentrum Berlin fur Sozialforschung. Thurik: Erasmus University. SR Centre for Economic Policy Research, Discussion Paper: 1710; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 80. PR 5 pounds or $10.00. JE O30. KW Government Policy. Europe. Growth. Entrepreneurship. Industrial Structure.
AB The purpose of this paper is to suggest that a fundamental shift in Europe, along with the other OECD countries, is taking place. This shift is from the managed economy to the entrepreneurial economy. While politicians and policy-makers have made a plea for guidance in the era of entrepreneurship, scholars have been slow to respond. The purpose of this paper is to make a first step identifying and articulating these differences. It does this by contrasting the most fundamental elements of the newly-emerging entrepreneurial economy with those of the managed economy. We identify fifteen trade-offs confronting these two polar words. The common thread throughout these trade-offs is the increased role of new and small enterprises in the entrepreneurial economy. A particular emphasis is placed on changes in economic policy demanded by the entrepreneurial economy vis-a-vis the managed economy. We then explore whether restructuring towards the entrepreneurial economy has been conducive to economic growth and job creation. Our empirical analysis links the stage of the transition towards an entrepreneurial economy to the growth rates of European countries over a recent period. We find that those countries that have introduced a greater element of entrepreneurship have been rewarded with additional growth.

PD November 1997. TI Do Services Differ From Manufacturing? The Post-Entry Performance of Firms in Dutch Services. AU Audretsch, David B.; Thurik, A. Roy; Klomp, Luuk. AA Audretsch: Wissenschaftzentrum Berlin fur Sozialforschung. Thurik: Erasmus University. Klomp: Centre for Advanced Small Business Economics, Erasmus University, Rotterdam. SR Centre for Economic Policy Research, Discussion Paper: 1718; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 32. PR 5 pounds or $10.00. JE L10, L80. KW Services. Survival. Growth.
AB A large literature has emerged focusing on the post-entry performance of firms and, in particular, on the links between firm growth, survival, size and age. While these studies have resulted in findings that are sufficiently consistent as to constitute stylized facts, virtually all of these studies are based on manufacturing. The purpose of this paper is to fill this gap in knowledge about the role of non-manufacturing in industrial organization and, in particular, in the post-entry performance of firms, or what happens to firms subsequent to entering an industry. We suggest theoretical reasons why the relationships between firm age and size on the one hand, and survival and growth on the other may, in fact, not be the same in services as they are for manufacturing. We use a longitudinal database for Dutch firms in the retail and hotel and catering sectors to identify around 13,000 new-firm start-ups and 47,000 incumbents in the services and track them over subsequent years. We are then able test to see whether the stylized results identified, based on manufacturing, still hold in the services. The results suggest that the most fundamental relationships between firm size, age, survival and growth are strikingly different for services than for manufacturing. In terms of the dynamics of industrial organization, services may, in fact, not simply mirror the manufacturing sector.

Austin-Smith, David

PD October 1997. TI Social Choice Theory, Game Theory, and Positive Political Theory. AU Austin-Smith, David; Banks, Jeffery S. AA Austin-Smith: Northwestern University. Banks: California Institute of Technology. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1196; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 42. PR $3.00 domestic; $5.00 airmail; $2.00

Northwestern faculty/students; make check out to Northwestern University. JE D71, D78. KW Positive Political Theory. Minimal Democracy. Prediction. Game Theory. Social Choice. AB In this paper, the authors consider relationships between the collective preference and the non-cooperative game-theoretic approaches to positive political theory. In particular, they show that an apparently decisive difference between the two approaches -- that in sufficiently complex environments (e.g. high dimensional choice spaces) direct preference aggregation models are incapable of generating any prediction at all, whereas non-cooperative game-theoretic models almost always generate predictions -- is indeed only an apparent difference. More generally, the authors argue that there is a fundamental tension when modeling collective decisions between insuring existence of well- defined predictions, a criterion of minimal democracy and general applicability to complex environments: while any two of the three are compatible under either approach, neither collective preference nor non- cooperative game theory can support models that simultaneously satisfy all three desiderata.

Autor, David H.

PD March 1997. TI Computing Inequality: Have Computers Changed the Labor Market? AU Autor, David H.; Katz, Lawrence F.; Krueger, Alan B. AA Autor: Harvard University. Katz: Harvard University and National Bureau of Economic Research. Krueger: Princeton University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5956; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 36. PR $5.00. JE J20, J31. KW Labor Studies.
AB This paper examines the effect of technological change and other factors on the relative demand for workers with different education levels and on the recent growth of U.S. educational wage differentials. A simple supply-demand framework is used to interpret changes in the relative quantities, wages, and wage bill shares of workers by education in the aggregate U.S. labor market in each decade since 1940 and over the 1990 to 1995 period. The results suggest that the relative demand for college graduates grew more rapidly on average during the past twenty-five years (1970-95) than during the previous three decades (1940-70). The increased rate of growth of relative demand for college graduates beginning in the 1970's did not lead to an increase in the college/high school wage differential until the 1980's because the growth in the supply of college graduates increased even more sharply in the 1970's before returning to historical levels in the 1980's. The acceleration in demand shifts for more-skilled workers in the 1970's and 1980's relative to the 1960's is entirely accounted for by an increase in within-industry changes in skill utilization rather than between- industry employment shifts.

Ayres, Ian

PD February 1997. TI Measuring Positive Externalities From Unobservable Victim Precaution: An Empirical Analysis of Lojack. AU Ayres, Ian; Levitt, Steven D. AA Ayres: Yale Law School. Levitt: Harvard Society of Fellows and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5928; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 36. PR $5.00. JE H23, K42. KW Public Economics.

AB Private expenditures on crime reduction have potentially important externalities. Observable measures such as barbed-wire fences and deadbolt locks may shift crime to those who are unprotected, imposing a negative externality. Unobservable precautions, on the other hand, may provide positive externalities since criminals cannot determine a priori who is protected. Focusing on one specific form of victim precaution, Lojack, we provide the first thorough empirical analysis of the magnitude of such externalities. Because installing Lojack does not reduce the likelihood that an individual car will be stolen, any decrease in the aggregate crime rates due to Lojack is an externality from the perspective of the individual Lojack purchaser. We find that the presence of Lojack is associated with a sharp fall in auto theft in central cities and a more modest decline in the remainder of the state. Rates of other crimes do not change appreciably. Our estimates suggest that, at least historically, the marginal social benefit of an additional unit of Lojack has been as much as 15 times greater than the marginal social cost in high crime areas.

Bacchetta, Philippe

PD November 1997. TI Consumption and Credit Constraints: International Evidence. AU Bacchetta, Philippe; Gerlach, Stefan. AA Bacchetta: Studienzentrum Gerzensee. Gerlach: Bank of International Settlements. SR Centre for Economic Policy Research, Discussion Paper: 1727; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 56. PR 5 pounds or $10.00. JE D12, E21, E51. KW Consumption. Credit. Liquidity Constraints. Kalman Filter.
AB If some consumers are liquidity-constrained, aggregate consumption should be 'excessively sensitive' to credit conditions as well as to income. Moreover, the 'excess sensitivity' may vary over time. Using data for Canada, France, Japan, the United Kingdom and the United States, we find a substantial impact of credit aggregates on consumption in all countries considered. Moreover, the borrowing/lending wedge is a significant determinant of consumption in Canada, Japan and the United States. Using extended Kalman filtering techniques, we show that excess sensitivity varies over time, with a clear tendency to decline in the United States.

Bagliano, Fabio

PD November 1997. TI Measuring Monetary Policy with VAR Models: An Evaluation. AU Bagliano, Fabio; Favero, Carlo A. AA Bagliano: Universita di Torino. Favero: IGIER, Universita Bocconi. SR Centre for Economic Policy Research, Discussion Paper: 1743; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 40. PR 5 pounds or $10.00. JE E44, E52. KW Monetary Transmission. VAR Models.
AB This paper evaluates VAR models designed to analyze the monetary policy transmission mechanism in the United States by considering three issues: specification, identification, and the effect of the omission of the long-term interest rate. Specification analysis suggests that only VAR models estimated on a single monetary regime feature parameter stability and do not show signs of mis-specification. The identification analysis shows that VAR-based monetary policy shocks and policy disturbances identified from alternative sources are not highly correlated but yield similar descriptions of the monetary

transmission mechanism. Lastly, the inclusion of the long-term interest rate in a benchmark VAR delivers a more precise estimation of the structural parameters capturing behavior in the market for reserves and shows that contemporaneous fluctuations in long-term interest rates are an important determinant of the monetary authority's reaction function.

Bagwell, Kyle
PD February 1997. TI Regionalism and Multilateral Tariff Cooperation. AU Bagwell, Kyle; Staiger, Robert W. AA Bagwell: Northwestern University. Staiger: University of Wisconsin and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5921; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 29. PR $5.00. JE F02, F13, F15. KW International Trade. Investment.
AB We consider a three-country world in which each country's import market is served by competing exporters from its two trading partners. We assume that weak multilateral enforcement mechanisms prevent governments from implementing efficient trade policies through a multilateral agreement that requires tariffs to conform to the most-favored-nation (MFN) principle. We then ask whether exceptions from MFN for the purpose of forming preferential agreements can lead to lower external tariffs, and thereby to a more efficient tariff structure under the multilateral agreement. We identify three opposing effects of preferential agreements on the multilateral tariff structure in this setting. A first effect, the tariff complementarity effect, works to reduce the desired external tariffs of countries that join together in a preferential agreement. Two additional effects of preferential agreements arise only when enforcement issues at the multilateral level are considered. One of these, the punishment effect, weakens the ability of the member countries of a preferential agreement to punish deviations from the multilateral agreement, thereby interfering with the ability of countries to sustain low tariffs under the multilateral agreement. The other of these, the tariff discrimination effect, allows countries to discriminate against those who would "free ride" under MFN.

PD February 1997. TI Reciprocity, Non-Discrimination and Preferential Agreements in the Multilateral Trading System. AU Bagwell, Kyle; Staiger, Robert W. AA Bagwell: Northwestern University. Staiger: University of Wisconsin and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5932; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 41. PR $5.00. JE F02, F13, F15. KW International Trade. Investment.
AB We present a framework for understanding and interpreting reciprocity and non-discrimination, the two principles that are the pillars of the multilateral trading system as embodied in GATT and its successor, the WTO. We show that GATT's principle of reciprocity serves to neutralize the world-price effects of a country's trade policy decisions, and hence can deliver efficient trade-policy outcomes for its member governments provided that the externalities associated with trade intervention travel through world prices. We then establish that externalities indeed travel in this way if and only if tariffs also conform to the principle of non-discrimination (MFN). In this way, the principles of reciprocity and non-discrimination can work in concert to deliver efficient outcomes

for the multilateral trading system. We also consider within our framework the implications of preferential agreements for the multilateral trading system. The introduction of free trade agreements complicates the way in which externalities are transmitted across countries, and in this environment the principle of reciprocity can no longer deliver efficient multilateral outcomes for its member governments. We do find, however, a limited place for customs unions in the multilateral trading system, provided that the member countries of the union have similar political preferences.

Bailey, Roy E.
PD August 1997. TI Poverty and the Welfare State in Inter-war London. AU Bailey, Roy E.; Hatton, Timothy J. AA University of Essex. SR Centre for Economic Policy Research, Discussion Paper: 1686; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 52. PR 5 pounds or $10.00. JE I32, I38, N34. KW Poverty. Welfare State. Social Security. Interwar Britain.
AB In this paper we re-examine poverty among working class households in inter-war London using the newly computerized records from the New Survey of London Life and Labour (NSLLL), a survey of living standards in London undertaken in 1929-31. First, we examine how the use of different poverty lines affects the number of households found to be in poverty. We then analyze the effects of the inter-war social security system in relieving poverty. Finally, we estimate what difference it would have made to the extent and incidence of poverty if the post-Beveridge social security system had been in place during the inter-war period. Our main conclusions are that the inter-war social security system had played a greater role in averting poverty than it has sometimes been given credit for, even though substantial poverty remained. The post-Beveridge social security system, if applied in the inter-war period, would have reduced poverty still further, but would not have eliminated it.

Baker, Laurence C.
PD April 1997. TI The Effect of Managed Care on Health Care Providers. AU Baker, Laurence C.; Brown, Martin L. AA Baker: Stanford University and National Bureau of Economic Research. Brown: National Cancer Institute, NIH. SR National Bureau of Economic Research Working Paper: 5987; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 30. PR $5.00. JE I01. KW Health Care.
AB We investigate the effect of managed care on the health care system, focusing on the effects managed care could have on the number and types of health care providers and their efficiency. By influencing providers, managed care may change the structure and performance of the entire health care system in ways that influence care provided to all patients. We begin by discussing the mechanisms by which managed care influences health care providers, concentrating on shifts in market demand and increases in the amount of attention paid to price in provider choices. We develop a theoretical framework that illustrates these effects. We then empirically examine the relationship between managed care activity and mammography providers. We find evidence that increases in HMO activity are associated with changes in the number of providers, the volume of services produced by each provider, and the prices they

charge. This evidence is consistent with the view that HMOs can have broad effects on health care providers.

Balduzzi, Pierluigi

AB We find that in 1989-1996, when U.S. monetary policy tightly targeted overnight fed funds rates, the volatility and persistence of spreads between target and term fed funds levels were larger for longer-maturity loans. We show that such patterns are consistent with an expectational model where target revisions are infrequent and predictable. In our model, the (autoco-) variance of the spreads of term fed funds rates from the target increases with maturity because longer-term rates are more heavily influenced by persistent expectations of future target changes.

Baldwin, Richard E.

AB This paper presents a model in which long-run growth and industrial location are jointly endogenous. Specifically, it introduces Romer- Grossman-Helpman endogenous growth into Krugman's core-periphery model with footloose labor. The paper focuses on stability of the symmetric equilibrium, showing that growth is a powerful destabilizing force. For instance, even with prohibitive trade barriers, the symmetric equilibrium is unstable as long as workers' discount rates are not too high. It also shows that inter-regional learning spillovers are a stabilizing force. Finally, the paper shows that agglomeration of industry is favorable to growth in both regions, so positive growth effects might offset the well-known static welfare loss that the periphery experiences when the core-periphery outcome occurs.

Baldwin, Robert E.

AB This paper investigates three hypotheses to account for the observed shifts in U.S. relative wages of less educated compared to more educated workers during the period from 1967 to 1992: increased import competition, changes in the relative supplies of labor of different education levels, and changes in technology. Our analysis relies on a basic relation of the standard general equilibrium trade model that relates changes in product prices to factor price changes and factor shares, along with information about changes in the composition of output, trade, within-industry factor use, and factor supplies. For the period from 1967 to 1973 we conclude that the relative increase in the supply of well educated labor was the dominant economic force that narrowed the wage gap among workers of different education levels. The wage gap continued to narrow during the rest of the 1970's, but our empirical results are not sufficiently clear-cut to conclude that the continued increase in the relative supply of more educated workers was again the main factor shaping relative wages. In a reversal of the previous trend, the wage gap between more educated and less educated workers widened sharply from 1980 to 1993.

Ball, Laurence

AB This paper defines an efficient rule for monetary policy as one that minimizes a weighted sum of output variance and inflation variance. It derives several results about the efficiency of alternative rules in a simple macroeconomic model. First, efficient rules can be expressed as "Taylor rules" in which interest rates respond to output and inflation. But the coefficients in efficient Taylor rules differ from the coefficients that fit actual policy in the United States. Second, inflation targets are efficient. Indeed, the set of efficient rules is equivalent to the set of inflation-target policies with different speeds of adjustment. Finally, nominal-income targets are not merely inefficient, but disastrous: they imply that output and inflation have infinite variances.

Banks, Jeffery S.

Barberis, Nicholas

AB Recent empirical research in finance has uncovered two families of pervasive regularities: underreaction of stock prices to news such as earnings announcements; and overreaction of stock prices to a series of good or bad news. In this paper, we present a parsimonious model of investor sentiment -- that is, of how investors form beliefs -- that is consistent with the empirical findings. The model is based on psychological

evidence and produces both underreaction and overreaction for a wide range of parameter values.

Barrett, Alan

PD July 1997. TI The Earnings Distribution and Returns to Education in Ireland, 1987- 94. AU Barrett, Alan; Callan, Tim; Nolan, Brian. AA The Economic and Social Research Institute, Ireland. SR Centre for Economic Policy Research, Discussion Paper: 1679; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 24. PR 5 pounds or $10.00. JE J31. KW Earnings Distribution. Returns to Education.

AB The increased supply of skilled labor and institutional factors have been advanced in an effort to explain why some countries have experienced smaller increases in earnings dispersion and in returns to education relative to the United States. Ireland's supply of skilled labor has increased sharply in recent years and it has had a highly centralized wage bargaining structure; hence, low growth in earnings dispersion would be expected. We compare the distribution of earnings in Ireland in 1987-94 and find a surprisingly large growth in earnings dispersion. In addition, using a decomposition technique we find that much of this is accounted for by increasing returns to education.

Barro, Jason R.

PD March 1997. TI Consolidation in the Medical Care Marketplace: A Case Study from Massachusetts. AU Barro, Jason R.; Cutler, David M. AA Barro: Harvard University. Cutler: Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5957; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 35. PR $5.00. JE I11. KW Health Care.

AB This paper examines consolidation in the Massachusetts hospital market. We find that consolidation is driven primarily by a large decline in the demand for hospital beds, resulting from increased enrollment in managed care and technological changes. The drive to consolidate appears through three primary forces: consolidation for closure; consolidation for economies of scale; and consolidation for network creation.

Bartel, Ann P.

PD February 1997. TI Technological Change and Wages: An Inter-Industry Analysis. AU Bartel, Ann P.; Sicherman, Nachum. AA Columbia University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5941; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 47. PR $5.00. JE J24, J31, O33. KW Labor Studies.

AB Previous research has found evidence that wages in industries characterized as "high tech," or subject to higher rates of technological change, are higher. In addition, there is evidence that skill-biased technological change is responsible for the dramatic increase in the earnings of more educated workers relative to less educated workers that took place during the 1980's. In this paper, we match a variety of industry level measures of technological change to a panel of young workers observed between 1979-1993 (NLSY) and examine the role played by unobserved heterogeneity in explaining the positive relationships between technological change and wages, and between technological change and the education premium. We find evidence that the wage premium associated with technological change is primarily due to the sorting of better workers into those industries. In addition, the education premium associated with technological change is found to be the result of an increase in demand for the innate ability or other observable characteristics of more educated workers.

Bartelsman, Eric J.

PD October 1996. TI The NBER Manufacturing Productivity Database. AU Bartelsman, Eric J.; Gray, Wayne. AA Bartelsman: Central Planning Bureau, Netherlands. Gray: Clark University and National Bureau of Economic Research. SR National Bureau of Economic Research Technical Paper: 205; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE D24, L60, O47. KW Manufacturing Productivity. Total Factor Productivity. Growth.

AB This paper provides technical documentation to accompany the NBER manufacturing productivity (MP) database. The database contains information on 450 4-digit manufacturing industries for the period 1958 through 1991. The data are compiled from various official sources, most notably the Annual Survey of Manufactures and Census of Manufactures. Also provided are estimates of total factor productivity (TFP) growth for each industry. The paper further discusses alternate methods of deflation and aggregation and their impact on TFP calculations.

Basu, Susanto

PD February 1997. TI Cyclical Productivity with Unobserved Input Variation. AU Basu, Susanto; Kimball, Miles S. AA University of Michigan and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5915; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 44. PR $5.00. JE D24, E32. KW Economic Fluctuations. Growth.

AB In this paper, we derive and estimate relationships governing variable utilization of capital and labor for a firm solving a dynamic cost-minimization problem. Our method allows for (i) imperfect competition, (ii) increasing returns to scale, (iii) unobserved changes in utilization, (iv) unobserved changes in technology, (v) unobserved fluctuations in the factor prices of capital and labor, (vi) unobserved fluctuations in the shadow price of output, and (vii) the non-existence of a value-added production function. We can estimate the parameters of interest without imposing specific functional forms or using restrictions from assuming the existence of a representative consumer. We find that variable capital and labor utilization explain 40-60 percent of the cyclically of the Solow residual in U.S. manufacturing, so true technology shocks have a lower correlation with output than the RBC literature assumes. Controlling for variable utilization also eliminates the evidence for increasing returns to scale. We show that our model-based proxies for variable utilization are valid even when extending the workweek of capital potentially has two costs: a shift premium paid to workers, as well as a higher rate of depreciation. Thus, these proxies can be used under very general conditions in a wide range of empirical work.

Beetsma, Roel M. W. J.

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

AB The authors use data from a television game show involving elementary lotteries and substantial prize money as a natural experiment to measure risk attitudes. They find robust evidence of substantial risk aversion. As an extension, they estimate the various models using transformations of the "true" probabilities to decision weights. The estimated degree of risk aversion increases further, while players tend to substantially overestimate their chances of winning. CRRA and CARA utility specifications perform approximately equally well, with CARA having the advantage that the players' decisions do not depend on their initial wealth.

Belke, Ansgar

AB This paper finds that intra-European exchange rate variability has a statistically strong -- and economically non-negligible -- negative impact on (un)employment and investment for most EU member countries (including France and Germany). No similar effect was found for dollar variability. Robustness tests show that this result holds up in the presence of policy instruments (e.g. interest rates) and cyclical variables (e.g. GDP growth) that might also have an impact on exchange rate variability. A simple model of the "option value of waiting" suggests that even short-term spikes in volatility can have a strong impact on investment and employment.

Ben-David, Dan

AB This paper focuses on one possible explanation for the empirical evidence of: (a) income convergence among the world's poorest countries and among its wealthiest countries; and (b) income divergence among most of the remaining countries. The model incorporates the assumption of subsistence consumption into the neo-classical exogenous growth model -- yielding outcomes that are consistent with the convergence-divergence empirical evidence. While subsistence consumption can lead to negative saving and disaccumulation of capital, it can also coincide with positive saving and accumulation of capital. The model predicts that the poorer the country, the lower its saving rate, a result that also appears to be borne out by the evidence provided here.

Bergemann, Dirk

AB We consider the provision of venture capital in a dynamic agency model. The value of the venture project is initially uncertain and more information arrives by developing the project. The allocation of funds and the learning process are subject to moral hazard. The optimal contract is a time-varying share contract which provides intertemporal risk-sharing between venture capitalist and entrepreneur. The share of the entrepreneur reflects the value of a real option. The option itself is based on the control of the funds. The dynamic agency costs may be high and lead to an inefficiently early end to the project. A positive liquidation explains the adoption of strip financing or convertible securities. Finally, relationship financing, including monitoring and the occasional replacement of management improves the efficiency of the financial contracting.

Berger, Allen N.

N.; Saunders, Anthony; Scalise, Joseph M.; Udell, Gregory F. AA Berger: Board of Governors of the Federal Reserve System and Wharton Financial Institutions Center. Saunders and Udell: New York University. Scalise: University of Pennsylvania. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/28; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 33. PR no charge. JE G21, G34. KW Banking. Mergers. Acquisitions. Lending.
AB The authors examine the effects of bank M&A's on small business lending. Their methodology permits empirical analysis of the great majority of U.S. bank M&A's since the late 1970's -- over 6,000 M&A's involving over 10,000 banks (some active banks are counted multiple times). The authors are the first to decompose the impact of M&A's on small business lending into static effects associated with a simple melding of the antecedent institutions and dynamic effects associated with post-M&A refocusing of the consolidated institution. They are also the first to estimate the reactions of other banks in local markets to M&A's. The authors find that the static effects of consolidation which reduce small business lending are mostly offset by the reactions of other banks in the market, and in some cases also by refocusing efforts of the consolidating institutions themselves.

Berkovec, James A.

PD June 1997. TI Premiums in Private Versus Public Bank Branch Sales. AU Berkovec, James A.; Mingo, John J.; Zhang, Xuechun. AA Berkovec: Federal Home Loan Mortgage Corporation. Mingo: Board of Governors of the Federal Reserve System. Zhang: American University. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/33; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 18. PR no charge. JE G21, G33, G34. KW Banking. Deposit Premiums. Market Inefficiency.
AB This paper is the first to directly estimate the determinants of differences in premiums received by public and private sellers in the market for bank branches (deposit bases). Deposit premiums received in private sector transactions exceeded those received by the FDIC and the RTC, even after controlling for known characteristics of the transactions and after corrections for possible sample selection bias. The observed differential disappeared by 1992, suggesting improved market efficiency and/or the impact of FDICIA (1991), which mandated "least-cost" resolution procedures for failed institutions. Additionally, the evidence suggests that bank branches are Independent Value Objects whose auctions always result in "unintended" transfers of value to the winning bidders. This result, while consistent with previous literature that found positive Cumulative Abnormal Returns to the winners of auctions for the branches of failed banks, nevertheless suggests that not all of the positive CAR's can be due to market inefficiency.

Berkowitz, Jeremy

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

Bertola, Giuseppe

TI Interest Rate Targeting and the Dynamics of Short-Term Rates. AU Balduzzi, Pierluigi; Bertola, Giuseppe; Foresi, Silverio; Klapper, Leora.

Bettendorf, L.

PD February 1998. TI Competition on the Dutch Coffee Market. AU Bettendorf, L.; Verboven, F. AA Bettondorf: CPB. Verboven: Universiteit Antwerpen and Tilburg University. SR Tilburg CentER for Economic Research Discussion Paper: 9810; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 20. PR no charge. JE D43, L13, L66. KW Prices. Coffee. Oligopoly. Markup Absorption.
AB World coffee bean prices have shown large fluctuations during the past years, whereas consumer prices for roasted coffee have varied considerably less. In this paper, the authors seek to explain the weak relationship between coffee bean and consumer prices. The authors adopt and estimate an aggregate model of oligopolistic interaction. It is shown that the relatively large share of costs other than bean costs accounts for the most important part of the weak relationship between bean and consumer prices. The remaining part follows from markup absorption, but is less important since oligopolistic interdependence is relatively competitive. The estimates are used to simulate the model under alternative behavioral assumptions: duopoly and monopoly. The computations show that consumer prices would have been much higher and would have fluctuated even less (due to greater markup absorption) under these alternative regimes.

Blau, David M.

PD February 1997. TI Retiree Health Insurance and the Labor Force Behavior of Older Men in the 1990's. AU Blau, David M.; Gilleskie, Donna B. AA University of North Carolina at Chapel Hill and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5948; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 37. PR $5.00. JE I10, J26. KW Health Care.
AB We estimate the impact of employer-provided retiree health insurance on the rate at which men aged 51-62 enter and exit the labor force and switch jobs. The models estimated are an approximation of the employment decision rules implied by a dynamic stochastic model of employment behavior of older individuals. We use data from the Health and Retirement Survey (HRS), which contains more detailed and accurate measures of retiree health insurance than those used in most previous studies. The results show that availability of employer-provided retiree health insurance (EPRHI) increases the rate of exit from employment by two percentage points per year on average if the individual shares the cost of the insurance coverage with the firm, and by six percentage points if the firm pays the entire cost. The impact of EPRHI on the annual rate of labor force exit increases with age, reaching nine percentage points by age 61. These are larger than the effects estimated in previous studies. The accurate and detailed health insurance measures available in the HRS help account for the larger effects found here. Controlling for unobserved heterogeneity, a possibility not accounted for in previous

studies, also has a substantial impact on the estimates.

Blomberg, S. Brock
TI   Lending Cycles.   AU   Asea, Patrick K.; Blomberg, S. Brock.

Blomstrom, Magnus
PD   June 1997.   TI   Regional Integration and Foreign Direct Investment.   AU   Blomstrom, Magnus; Kokko, Ari. AA   Stockholm School of Economics.   SR   Centre for Economic Policy Research, Discussion Paper: 1659; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V   7DB,   United   Kingdom.   Website: www.cepr.demon.co.uk.   PG   44.   PR   5 pounds or $10.00. JE   F15, F23.   KW   Regional Integration. FDI. MNCs.

AB   This paper deals with the investment effects of regional integration agreements and discusses how such arrangements may affect inward and outward foreign direct investment (FDI) flows in the integrating region. After setting up a conceptual framework for the analysis, we provide three studies focusing on different kinds of regional integration: North-North integration (Canada joining CUSFTA), North-South integration (Mexico's accession to NAFTA), and South-South integration (MERCOSUR). The main conclusion of the study is that the responses to an integration agreement largely depend on the environmental change brought about by the agreement and the locational advantages of the participating countries and industries. Moreover, the findings suggest that the most positive impact on FDI has occurred when regional integration agreements have coincided with domestic liberalization and macroeconomic stabilization in the member countries.

Blume, Andreas
PD   December 1997.   TI   Evolution of Communication With Partial Common Interest.   AU   Blume, Andreas; DeJong, Douglas V.; Kim, Yong-Gwan; Sprinkle, Geoffrey B. AA   Blume: University of Iowa. DeJong: CentER and Tilburg University. Kim: Seoul City University. Sprinkle: University of Wisconsin-Madison.   SR   Tilburg CentER for Economic Research Discussion Paper: 97115; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000   Le   Tilburg,   The   Netherlands.   Website: cwis.kub.nl/fcw5/center/center.htm.   PG   37.   PR   no charge.   JE   C70,   C91,   D83.   KW   Communication. Common Interest. Information Transmission.

AB   This paper uses experiments to investigate the evolution of communication. The authors consider simple games of information transmission in which the interests of senders and receivers are imperfectly aligned. They show that under four canonical   incentive   conditions   the   no-communication hypothesis can be rejected with and without literal meanings. Communicative outcomes are less likely to evolve and, if they do, evolve more slowly without a commonly understood language. When communicative outcomes are seen, they tend to satisfy a partial common interest condition. Equilibria are useful guideposts for analyzing outcomes but are not always obtained; e.g., with literal meanings the authors observe stable sucker behavior and adherence to local meanings and, without literal meanings, combinations of actions that could not coexist under any equilibrium.

PD   March 1998.   TI   Learning in Sender-Receiver Games. AU   Blume, Andreas; De Jong, Douglas V.; Neumann, George R.; Savin, N. E.   AA   Blume, Savin and Neumann: University

of Iowa. De Jong: CentER, Tilburg University and University of Iowa.   SR   Tilburg CentER for Economic Research Discussion Paper: 9828; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg,   The   Netherlands.   Website: cwis.kub.nl/few5/center/center.htm.   PG   31.   PR   no charge.   JE   C13,   C70,   C90,   D83.   KW   Games. Experiments.   Non-Nested   Testing.   Stimulus   Response. Learning.

AB   This paper compares a well-known stimulus-response (SR) model and a belief-based learning (BBL) model using experimental data from sender-receiver games. When the models are fitted to the data by maximum likelihood, the fits are good for both models. In contrast to Camerer and Ho [1997], the authors compare the models using a formal statistical procedure based on the Davidson and MacKinnon P-test for non-nested hypotheses. The motivation for using this test is that the models are naturally non- nested. Both models involve a certain adjustment parameter, which measures the importance of forgetting. The results show that the outcome of the test is sensitive to the value chosen for the adjustment parameter. Depending on the value selected, the P-test favors the.

Bohn, James G.
PD   January 1997.   TI   The Moral Hazard of Insuring the Insurers.   AU   Bohn, James G.; Hall, Brian J.   AA   Bohn: Board of Governors of the Federal Reserve System. Hall: Harvard University.   SR   National Bureau of Economic Research Working Paper: 5911; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org.   PG   not available.   PR $5.00. JE   G22, H10.   KW   Public Economics.

AB   State guaranty funds are quasi-governmental agencies that provide insurance to policyholders against the risk of insurance company failure. But insurance provided by guaranty funds, like all insurance, creates moral hazard problems, especially for companies that are insolvent or near-insolvent. The key insight of this paper is that because of the time lag between premium payments and losses (which is especially lengthy in long-tail lines), writing policies is one way for insurance   companies   to   borrow   money   (i.e.,   from policyholders). Moreover, the existence of guaranty fund insurance enables insurance companies, even very risky ones, to borrow from policyholders at rates that do not reflect the insurer's default risk. Thus, one way for insurance companies to game the guaranty fund system is to engage in excessive premium writing. Consistent with this idea, we find that insolvent P&C insurance companies tended to have very high premium growth before they failed. More than one-third of the failed insurance companies had premium growth of more than 50 percent in the two years before failure. Moreover, this excessive premium growth was more pronounced in long-tail lines than in short-tail lines. We also find evidence that greater regulatory resources are associated with less gaming of the system.

Bomfim, Antulio
PD   August 1997.   TI   Expectations, Learning and the Costs of Disinflation: Experiments Using the FRB/US Model. AU   Bomfim, Antulio; Tetlow, Robert; Von zur Muehlen, Peter; Williams, John.   AA   Board of Governors of the Federal Reserve System.   SR   Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series:

1997/42; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 33. PR no charge. JE E17, E31, E52, E58. KW Monetary Policy. Disinflation. Expectations. Learning. Macroeconomic Modeling.
AB The costs of disinflation are explored using the Board's new sticky- price rational expectations macroeconometric model of the U.S. economy, FRB/US. The model nests both model consistent and 'restricted- information rational' expectations. Monetary policy is governed by interest-rate reaction functions of which two are considered: the well-known Taylor rule and another rule that is more aggressive and richer in its specification, estimated using data for the last 15 years. Agents are required to learn of shifts of the inflation target using linear updating rules. The simulated costs of disinflation are compared with other estimates of sacrifice ratios.

Boone, Jan
PD December 1997. TI Technological Progress and Unemployment. AA CentER and Tilburg University. SR Tilburg CentER for Economic Research Discussion Paper: 97117; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 30. PR no charge. JE E24, J23, O31, O33. KW Unemployment. Enterprise Investments. Defensive Investments. Downsizing. Welfare.
AB This paper presents a model where the form of innovations is endogenous. It is shown that, with labor market imperfections that raise the wage above the shadow price of labor, firms overinvest in innovations cutting labor costs and underinvest in increasing quality. As a result, the market outcome features lower long run growth, higher unemployment and lower welfare than the social optimum. It is further shown that firms' incentives to cut labor costs are increased as wages rise, as the industry becomes more competitive and as the industry's growth rate falls behind the economy wide growth rate.

Bordo, Michael
PD July 1997. TI Implications of the Great Depression for the Development of the International Monetary System. AU Bordo, Michael; Eichengreen, Barry. AA Bordo: Rutgers University. Eichengreen: University of California, Berkeley. SR Centre for Economic Policy Research, Discussion Paper: 1680; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 44. PR 5 pounds or $10.00. JE E50, F30, H30. KW Great Depression. International Monetary System. Exchange Rates.
AB In this paper we speculate about the evolution of the international monetary system in the last two-thirds of the twentieth century absent the Great Depression, but present the major post-Depression political and economic upheavals: World War II and the Cold War. We argue that without the Depression the gold-exchange standard of the 1920s would have persisted until the outbreak of World War II. It would have been suspended during the war and for a period of post-war reconstruction before being restored in the first-half of the 1950s. The Bretton Woods Conference would not have taken place, nor would a Bretton Woods System of pegged-but-adjustable exchange rates and restrictions on capital account convertibility have been established. Instead, an unreformed gold-exchange standard of pegged exchange rates and unlimited international capital mobility would have been restored after World War II. But this gold-exchange standard would have collapsed even earlier than was actually the case of Bretton Woods. The move towards floating exchange rates that followed would have taken place well before 1971 in our counterfactual. We construct a model of the international monetary system from 1928-71 and simulate its implications for the determination of the world price level and the durability of the hypothetical gold- exchange standard.

Borgers, Aloys W. J.
TI Consumer Choice of Modularized Products: A Conjoint Choice Experiment Approach. AU Dellaert, Benedict G. C.; Borgers, Aloys W. J.; Louviere, Jordan J.; Timmermans, Harry J. P.

Borm, Peter
TI Optimal Design of Pension Funds: A Mission Impossible. AU Suijs, Jeroen; De Waegenaere, Anja; Borm, Peter.

Bostic, Raphael W.
PD July 1997. TI Racial Differences in Short-Run Earnings Stability and Implications for Credit Markets. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/34; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 37. PR no charge. JE G21, J31, J71. KW Credit Risk. Race. Earnings Variance. Mortgages.
AB This paper examines the claim that observed racial differences in rejection rates for mortgage applications, which persist after controlling for many relevant factors, are due to racial differences in short-run earnings stability, which has not typically been included in empirical tests. The evidence does not support the proposition that blacks suffer from greater earnings instability than comparable whites, as few consistent significant differences between black and white earnings volatility are found. Only in the case of drastic earnings shocks with persistent effects does the possibility of significant racial differences reasonably remain. In general, racial differences in earnings instability appear to be minor and are unlikely to result in substantial differences in creditworthiness.

Boudett, Kathryn Parker
TI Does Acquisition of a GED Lead to More Training, Post-Secondary Education, and Military Service for School Dropouts? AU Murnane, Richard J.; Willett, John B.; Boudett, Kathryn Parker.

Bowen, Harry P.
TI World Trade Flows, 1970-1992, with Production and Tariff Data. AU Feenstra, Robert C.; Lipsey, Robert E.; Bowen, Harry P.

Boyer, Brian H.
PD December 1997. TI Pitfalls in Tests for Changes in Correlations. AU Boyer, Brian H.; Gibson, Michael S.; Loretan, Mico. AA Board of Governors of the Federal

Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 597; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551.Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 13. PR no charge. JE G11, G12, G13. KW Risk. Conditional Correlation. Foreign Exchange. Derivatives. Hedging.

AB Correlations are crucial for pricing and hedging derivatives whose payoff depends on more than one asset. Typically, correlations computed separately for ordinary and stressful market conditions differ considerably, a pattern widely termed "correlation breakdown." As a result, risk managers worry that their hedges will be useless when they are most needed, namely during "stressful" market situations. The authors show that such worries may not be justified since "correlation breakdowns" can easily be generated by data whose distribution is stationary and, in particular, whose correlation coefficient is constant. The authors make this point analytically, by way of several numerical examples, and via an empirical illustration. But, risk managers should not necessarily relax. Although "correlation breakdown" can be an artifact of poor data analysis, other evidence suggests that correlations do in fact change over time, though not in a way that is correlated with "stressful" market conditions.

TI Evaluating Forecasts of Correlation Using Option Pricing. AU Gibson, Michael S.; Boyer, Brian H.

Bradford, David F.

PD February 1997. TI On the Uses of Benefit-Cost Reasoning in Choosing Policy Toward Global Climate Change. AA Princeton University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5920; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 11. PR $5.00. JE D61. KW Public Economics.

AB In the debate about the correct discount rate to use in evaluating policy with regard to climate change, which covers the entire world and extends for centuries, the conditions for deploying benefit-cost analysis are often overlooked. Where (a) income distributional effects of policies are large and (b) one cannot take for granted compensating adjustment in other policy instruments affecting distribution, simple aggregation of gains and losses is unlikely to provide a convincing basis for action, as an ethical matter, or predictor of policy, as a political matter.

Brainard, S. Lael

PD March 1997. TI Are U.S. Multinationals Exporting U.S. Jobs? AU Brainard, S. Lael; Riker, David A. AA Brainard: Old Executive Office Building and National Bureau of Economic Research. Riker: University of California, San Diego. SR National Bureau of Economic Research Working Paper: 5958; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 18. PR $5.00. JE F23, J23. KW International Trade. Investment.

AB Many allege multinationals are "exporting" U.S. jobs when they expand operations abroad. This paper investigates the extent to which expansion of offshore production by U.S. multinationals reduces labor demand at home and at other

offshore locations, using a panel on U.S. multinationals and their foreign affiliates between 1983 and 1992. The results suggest that foreign affiliate employment substitutes modestly at the margins for U.S. parent employment. There is much stronger substitution between workers at affiliates in alternative low wage locations. In contrast, activities performed by affiliates at locations with different workforce skill levels in the same region appear to be complements. The results suggest a vertical division of activities among countries with different workforce skill levels, where workers in developing countries compete with each other to perform the activities most sensitive to labor costs. When wages in developing countries, such as Mexico, fall 10 percent, U.S. parent employment falls 0.17 percent, while affiliates in other developing countries, such as Malaysia, lay off 1.6 percent of their workforce.

TI U.S. Multinationals and Competition from Low Wage Countries. AU Riker, David A.; Brainard, S. Lael.

Brander, James

PD April 1997. TI International Trade Between Consumer and Conservationist Countries. AU Brander, James; Taylor, M. Scott. AA University of British Columbia and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6006; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 35. PR $5.00. JE F10. KW International Trade. Investment. AB We consider trade between a "consumer" country with an open access renewable resource and a "conservationist" country that regulates resource harvesting to maximize domestic steady-state utility. In what we call the "mild overuse" case, the consumer country exports the resource good and suffers steady-state losses from trade, as suggested by the "conventional wisdom" that weak resource management standards confer a competitive advantage on domestic firms in the resource sector but cause welfare losses. Strikingly, however, when the resource stock is most in jeopardy, the conservationist country exports the resource good in steady state and both countries experience gains from trade.

Brayton, Flint

PD February 1997. TI The Evolution of Macro Model at the Federal Reserve Board. AU Brayton, Flint; Levin, Andrew T.; Tryon, Ralph; Williams, John C. AA Federal Reserve Board. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/29; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 34. PR no charge. JE C50, E17, E52. KW Federal Reserve Board. Macroeconomics. Expectations. Intertemporal Decisions.

AB Large-scale macroeconomic models have been used at the Federal Reserve Board for nearly 30 years. After briefly reviewing the first generation of Fed models, which were based on the IS/LM/Phillips curve paradigm, the paper describes the structure and properties of a new set of models. The new models are more explicit in their treatment of expectations formation and household and firm intertemporal decision making. The incorporation of more rigorous theoretical microfoundations is accomplished while maintaining a high standard of goodness of fit. Simulations illustrate the effects of alternative assumptions about the formation of expectations and policy credibility on system properties.

Brazell, Jeff D.

TI   Variations in Consumer Choice Consistency: The Case of Attribute-Level Driven Shifts in Consistency. AU   Dellaert,. Benedict G. C.; Brazell, Jeff D.; Louviere, Jordan J.

Brown, Donald J.

PD   August 1997. TI   Three Lectures on the Walrasian Hypotheses for Exchange Economies. AA   Yale University. SR   Yale Economic Growth Center Discussion Paper: 782; Yale University, Economic Growth Center, P.O. Box 208269, New   Haven,   CT   06520-8269.   Website: www.econ.yale.edu/egc. PG   17. PR $2.00 plus postage. JE   D11, D51.   KW   Exchange   Economies.   Testable Restrictions. Walrasian Equilibrium.

AB   This paper discusses the testable implications of the Walrasian hypotheses: H1 Observed market demand is the sum of consumer's demands derived from utility maximization subject to budget constraints. H2 There exists an observable (locally) unique equilibrium price system such that the observable market demand is equal to the observable market supply in every market. H3 The observed equilibrium price system is a (locally) stable equilibrium of tatonnement price adjustment. The main results are the Brown-Matzkin Theorem: H1 is testable, and the Brown- Shannon Theorem: H2 and H3 are not testable.

Brown, Donna

PD   September 1998. TI   If You're Happy and You Know It... Job Satisfaction in the Low Wage Service Sector. AU   Brown, Donna; McIntosh, Steven. AA   Centre for Economic Performance and London School of Economics. SR   London School of Economics, Centre for Economic Performance Discussion Paper: 405; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG   27. PR   5   pounds for individual copies; 95 pounds for yearly subscription. JE   J28. KW   Job Satisfaction. Wages. Service Sector.

AB   The issue of worker satisfaction is important both for the sake of individuals themselves and also for employers. Highly satisfied staff have been shown to have lower propensities to quit and to be absent. Whilst there have been some interesting contributions in this field, the existing studies are weakened by their inability to control for workplace characteristics. Uniquely, the authors' data set, covering three low wage sectors, enables them to do this whilst still providing a wealth of demographic information. Using principal components analysis they examine five measures of workers' satisfaction and find that individuals respond quite differently depending upon the measure of contentment employed. The authors then examine which of their component forms of satisfaction has the greatest impact on overall satisfaction. Satisfaction with short-term rewards and long-term prospects are found to be far more influential in determining overall satisfaction than contentment with social relationships or work intensity.

Brown, Martin L.

TI   The Effect of Managed Care on Health Care Providers. AU   Baker, Laurence C.; Brown, Martin L.

Brown, Stephen J.

PD   January 1997. TI   Offshore Hedge Funds: Survival and Performance 1989-1995. AU   Brown, Stephen J.; Goetzmann,

William N.; Ibbotson, Roger G. AA   Brown: New York University. Goetzmann: Yale University and National Bureau of   Economic   Research.   Ibbotson: Yale   University. SR   National Bureau of Economic Research Working Paper: 5909; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG   32. PR $5.00. JE   G23, N20. KW   Asset Pricing.

AB   We examine the performance of the offshore hedge fund industry over the period 1989 through 1995 using a database that includes defunct as well as currently operating funds. The industry is characterized by high attrition rates of funds and little evidence of differential manager skill. We develop endogenous style categories for relative fund performance measures and find that repeat-winner and repeat-loser patterns in the data are largely due to style effects in that data.

Brunner, Allen D.

PD   April 1998. TI   El Nino and World Primary Commodity Prices: Warm Water or Hot Air? AA   Board of Governors of the Federal Reserve System. SR   Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 608; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551.Website: www.bog.frb.fed.us/pubs/workingpapers.htm.   PG   26. PR   no charge. JE   E31, E32, F15, F40, Q11. KW   El Nino. Commodity Prices. Business Cycles. Growth.

AB   This paper examines the historical effects of El Nino on world prices and economic activity. Although the primary focus is on world real non- oil primary commodity prices, the effects on G-7 consumer price inflation and GDP growth are also considered. This paper has several distinct advantages over previous studies. First, several econometric models are estimated using fairly broad measures of prices and economic activity. Second, the models include continuous measures of El Nino intensity rather than dummy variable measures. Finally, confidence intervals are constructed for all estimated effects of El Nino on world prices and economic activity. The analysis indicates that El Nino has economically-important and statistically-signi ficant effects on world real commodity prices. A one-standard-deviation surprise in El Nino, for example, raises real commodity price inflation about 3-1/2 to 4 percentage points. El Nino also has some explanatory power for world consumer price inflation and world economic activity.

Brusco, Sandro

TI   The Optimal Design of a Market. AU   Jackson, Matthew O.; Brusco, Sandro.

Buetler, Monika

PD   February 1998. TI   The Choice Between Pension Reform Options. AA   CentER and Tilburg University. SR   Tilburg CentER for Economic Research Discussion Paper: 9809; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG   41. PR   no   charge. JE   D72, D91, H55. KW   Public Pensions. Reforms. Majority Voting. Utility Comparisons.

AB   The authors evaluate the likelihood of different reforms of an unsustainable pay-as- you-go pension system. Individual agents' preferences are determined for 15 age groups and all

possible levels of wealth to account for expectations held prior to a reform. Moreover, the authors introduce "indifference bands" in an age-savings plane to assess the robustness of their findings. Majority votes tend to favor distortionary tax increases over benefit reductions. Tax-benefit linkages and especially altruistic preferences can lead to more efficient voting outcomes. Although wealth holdings is a crucial variable in determining individual preferences, the ranking of reforms is generally not affected.

Buiter, Willem H.

PD November 1997. TI Transition Issues for the European Monetary Union. AU Buiter, Willem H.; Sibert, Anne C. AA Buiter: University of Cambridge. Sibert: Birkbeck College. SR Centre for Economic Policy Research, Discussion Paper: 1728; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 32. PR 5 pounds or $10.00. JE E58, E61, E63, F31, F33, F41, F42. KW European Monetary Union. Stability and Growth Pact. Structural Reforms.
AB If Stage Three of EMU starts on 1 January 1999, transition issues remain on two time scales. Until 1 July 2002, national currencies and the euro coexist as legal tender. We argue that intra-EMU currency risk exists in principle during that period, but that no EMU member can be forced out through speculative attacks. Cohabitation of Ins and Outs has an open-ended time scale. We discuss the effect of EMU on incentives for both Ins and Outs to undertake structural reform and the coordination problems associated with the distribution of seigniorage revenue and the Stability and Growth Pact.

Burgess, Simon

PD October 1997. TI A Disaggregate Analysis of the Evolution of Job Tenure in Britain, 1975-93. AU Burgess, Simon; Rees, Hedley. AA University of Bristol. SR Centre for Economic Policy Research, Discussion Paper: 1711; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 28. PR 5 pounds or $10.00. JE J60. KW Job Tenure.
AB There continues to be much debate about whether the widescale adoption of new technologies, and the increasing intensity of competition through globalization of product markets have lead to significant changes in job tenure distributions. Our previous work showed that this was not the case at the level of the economy as a whole. To be precise, we found a slight fall for men, and no change for women. This paper extends that work by taking the individual data and investigating changes in the determinants of job tenure. We first look at the age-tenure profile for different birth cohorts of workers, ranging from those born before 1925 to those born in the 1960s. There appears to be little change in this profile for men; for women, one noticeable feature is the increasing likelihood of holding a long-term job in the 25-35 age range. We then estimate probability models for two different cuts of the tenure distribution on the 200,000 observations in our dataset. We find that, controlling for a set of age, demographic, educational, industrial and occupational characteristics, the proportion of workers in short jobs and longer jobs has about the same path as in the aggregate (unconditional) analysis. Further, allowing for the effect of all these characteristics to vary with time does not uncover any evidence of deterioration

for particular groups.

PD October 1997. TI Job Tenure and Labour Market Regulation: A Comparison of Britain and Italy Using Micro Data. AU Burgess, Simon; Rees, Hedley; Pacelli, Lia. AA Burgess and Rees: University of Bristol. Pacelli: Ticerche e Progetti, Turin and University College London. SR Centre for Economic Policy Research, Discussion Paper: 1712; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 36. PR 5 pounds or $10.00. JE J60, J68. KW Job Tenure. Labor Market Regulation.
AB Given a general belief that jobs last longer in tightly regulated labor markets, the presumption would be that jobs last longer in Italy than they do in Britain. We use two large micro datasets to address this issue. Surprisingly, we find a higher proportion of male workers in Britain than in Italy are in jobs that have lasted at least five years. This result holds conditioning on individual control variables. We find the opposite result for women, but there are reasons for treating this with some skepticism. This result suggests a complex relationship between labor market institutions and the reallocation of labor.

PD October 1997. TI The Reallocation of Labour and the Lifecycle of Firms. AU Burgess, Simon; Lane, Julia; Stevens, David. AA Burgess: University of Bristol. Lane: The American University. Stevens: University of Baltimore. SR Centre for Economic Policy Research, Discussion Paper: 1713; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 36. PR 5 pounds or $10.00. JE J60, J63, L20. KW Job Reallocation. Worker Reallocation. Firm Lifecycle. Firm Death.
AB This paper uses a unique panel dataset of firms and workers to investigate the relationship between the firm's lifecycle and the reallocation of labor. We distinguish labor reallocation associated with job reallocation, and reallocation of workers over a fixed configuration of jobs. We find that firms at the beginning and end of their lifecycles contribute disproportionately to labor market flows, with sorting between firms particularly important among young firms, whereas sorting within firms is more important among mature firms. We also find that high churning flows are associated with a lower probability of a young firm surviving.

PD October 1997. TI Jobs, Workers and Changes in Earnings Dispersion. AU Burgess, Simon; Lane, Julia; Stevens, David. AA Burgess: University of Bristol. Lane: The American University. Stevens: University of Baltimore. SR Centre for Economic Policy Research, Discussion Paper: 1714; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 36. PR 5 pounds or $10.00. JE D33, J31. KW Earnings Inequality. Within-Group Inequality. Allocation of Workers. Matched Worker-Firm Panels.
AB The 'fractal' nature of the rise in earnings dispersion is one of its key features and remains a puzzle. This paper offers a new perspective on the causes of changes in earnings dispersion, focusing on the role of labor reallocation. Once we drop the assumption that all firms pay a given worker the same, the allocation of workers to firms matters for the dispersion of earnings. This perspective highlights two new factors that can affect the dispersion of earnings: rates of job and worker

reallocation, and the nature of the process allocating workers to jobs. We set out a framework capturing this idea and quantify the impact of reallocation on earnings dispersion, using a dataset which comprises almost the universe of workers and the universe of employers in Maryland. We show that these factors have potentially large effects in general on earnings dispersion. In the case of Maryland over the period 1985-94, the changing allocation of workers to jobs played a significant role in explaining movements in the dispersion of earnings.

PD October 1997. TI "I Vont To Be Alone" Transitions to Independent Living, Marriage and Divorce Among Young Americans. AU Burgess, Simon; Propper, Carol; Aassve, Amstein. AA University of Bristol. SR Centre for Economic Policy Research, Discussion Paper: 1715; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 28. PR 5 pounds or $10.00. JE J12. KW Household Formation. Marriage. Divorce.
AB We investigate the importance of economic factors in young Americans' decisions to form and dissolve households. We adopt a search theoretic framework to analyze the decisions to: leave the parental home; form a marriage or partnership; and dissolve a marriage or partnership. We focus, in particular, on the impact of economic factors. Using a 14-year panel dataset of young Americans (the NLSY), we find an important role for income in all these transitions. High income in the individual's present state reduces the chance of changing state, while high expected income in the destination state makes a move more likely.

Burkhauser, Richard V.
PD April 1997. TI Labor Earnings Mobility and Inequality in the United States and Germany During the Growth Years of the 1980's. AU Burkhauser, Richard V.; Holtz-Eakin, Douglas; Rhody, Stephen E. AA Burkhauser and Rhody: Syracuse University. Holtz-Eakin: Syracuse University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5988; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 42. PR $5.00. JE D31, I32, J68. KW Labor Studies.
AB Recent years have witnessed increased interest in issues of inequality and mobility in the labor market. Using data from the Panel Study of Income Dynamics and the German Socio-Economic Panel, we compare the labor earnings mobility of prime age men and women in the United States and Germany during the growth years of the 1980's. Despite major differences in labor market institutions we find very similar patterns in the two countries. Our formal models of labor earnings dynamics suggest a great deal of persistence in both countries. In the United States this may derive from permanent individual-specific differences among men, while in Germany random shocks are found to persist longer for men. Women in Germany and the United States have similar earnings dynamics.

Cabral, Luis M. B.
PD November 1997. TI Entry Mistakes. AA Cabral: Universidade Nova de Lisboa. SR Centre for Economic Policy Research, Discussion Paper: 1729; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 36. PR 5 pounds or $10.00. JE L10, L60, L90. KW Entry.

Entry Regulation. Welfare. Aircraft Manufacturing.
AB Frequently, aspiring entrants have only limited information about their potential rivals' entry decisions. As a result, the outcome of the entry game may be that more firms enter than the market can sustain; or, at least, that unnecessary entry investments are made. We refer to these outcomes as 'entry mistakes'. We consider two models of non-coordinated entry. In these models, entry mistakes occur because of lags in observing rivals' entry decisions (grab-the-dollar entry) or because entry investments take time (war-of-attrition entry). The wide-body aircraft industry in the late 1960s is presented as supporting evidence for the models' assumptions. We also discuss the welfare implications of non-coordinated free entry. Both models predict that entry incentives are excessive (resp. insufficient) when duopoly profits are high (resp. low). If entry costs are high, however, entry incentives are excessive under war-of-attrition entry but insufficient under grab-the-dollar entry.

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

Callan, Tim
TI The Earnings Distribution and Returns to Education in Ireland, 1987- 94. AU Barrett, Alan; Callan, Tim; Nolan, Brian.

Calomiris, Charles W.
PD March 1997. TI Was the Great Depression a Watershed for American Monetary Policy? AU Calomiris, Charles W.; Wheelock, David C. AA Calomiris: Columbia University and National Bureau of Economic Research. Wheelock: Federal Reserve Bank of St. Louis. SR National Bureau of Economic Research Working Paper: 5963; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 65. PR $5.00. JE E42, E50, N12. KW Development. American Economy. Monetary Economics.
AB The Great Depression changed the institutions governing monetary policy. These changes included the departure from the gold standard, an opening of a new avenue for monetizing government debt, changes in the structure of the Federal Reserve System, and new monetary powers of the Treasury. Ideological changes accompanied institutional changes. We examine whether and how these changes mattered for post-Depression monetary policy. With respect to the period 1935-1941, the tools of Fed policy, but not its goals or tactics, changed. But structural reforms weakened the Federal Reserve relative to the Treasury, and removed a key limit on the monetization of government debt. The increased power of the Treasury to determine the direction of policy, along with the departure from gold and the new "technology" for monetizing government debt produced a new (albeit small) inflationary bias in monetary policy that lasted until the Treasury-Fed Accord of 1951. The Fed regained some independence with the Accord of 1951. The Fed returned to its traditional (pre-Depression) operating methods, and the procyclical bias in these procedures -- along with pressures to monetize government debt -- explains how the Fed stumbled into an inflationary policy in the 1960's.

Calvo, Guillermo A.

PD February 1997. TI Uncertain Duration of Reform: Dynamic Implications. AU Calvo, Guillermo A.; Drazen, Allan. AA Calvo: University of Maryland. Drazen: University of Maryland and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5925; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 20. PR $5.00. JE E32, F41. KW International Finance. Macroeconomics.

AB We develop a framework to study the effects of policies of uncertain duration on consumption dynamics under both complete and incomplete markets. We focus on the dynamic implications of market incompleteness, specifically on the lack of state-contingent bonds. Two policies are considered: pure output-increasing and tariff-reducing (trade liberalization). With complete markets, the output-increasing policy leads to flat consumption, while with no contingent assets, consumption jumps upward on the announcement of the policy, continues rising as long as the policy is in effect, and collapses when it is abandoned. A similar consumption path obtains in a trade liberalization in the realistic case of low elasticity of substitution and no rebate of tariffs. Market incompleteness rationalizes the existence of gradual changes in consumption.

Caminal, Ramon

PD June 1997. TI Bank Solvency, Market Structure, and Monitoring Incentives. AU Caminal, Ramon; Matutes, Carmen. AA Institut d'Analisi Economica, Universitat Autonoma. SR Centre for Economic Policy Research, Discussion Paper: 1665; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 44. PR 5 pounds or $10.00. JE D40, D82, G21. KW Moral Hazard. Credit Constraint. Monitoring, Banking Competition. Bankruptcy.

AB We analyze the impact of market structure on the probability of banking failure when banks' loan portfolios are subject to aggregate uncertainty. In our model borrowers are subject to a moral hazard problem, which induces banks to choose between two second-best alternative devices: costly monitoring and credit rationing. We show that investment depends on both the lending rate and the information structure. Since monitoring incentives increase with interest rate margins, the relationship between market structure and investment is ambiguous. Also, larger investment levels imply that the expected return of marginal projects is lower and thus banks' portfolios are more vulnerable to aggregate uncertainty. Consequently, a monopoly bank monitors borrowers more intensively, rations the amount of credit less frequently and hence may go bankrupt with higher probability than competitive banks.

PD October 1997. TI Can Competition in the Credit Market be Excessive? AU Caminal, Ramon; Matutes, Carmen. AA Caminal: Institut d'Analisi Economica, Universitat Autonoma. Matutes: Institut d'Analisi Economica. SR Centre for Economic Policy Research, Discussion Paper: 1725; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 48. PR 5 pounds or $10.00. JE D82, G21, L10. KW Market Power. Monitoring. Credit Rationing. Moral Hazard.

AB We study the welfare implications of market power in a model where banks choose between credit rationing and

monitoring in order to alleviate an underlying moral-hazard problem. We show that the effect of banks' market power on social welfare is the result of two countervailing effects. On the one hand, higher market power increases lending rates, worsens the borrower's incentive problem and investment is further reduced below the efficient level. On the other hand, higher market power induces banks to exert higher monitoring effort and reduces the frequency of credit rationing. Whenever the second effect dominates, it is socially optimal to provide banks with some degree of market power.

PD November 1997. TI Price Dynamics and Consumer Learning. AU Caminal, Ramon; Vives, Xavier. AA Institut d'Analisi Economica, CSIC. SR Centre for Economic Policy Research, Discussion Paper: 1744; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 24. PR 5 pounds or $10.00. JE D43, D83, L13. KW Market Shares. Learning. Oligopoly Pricing.

AB This paper studies the price dynamics induced by strategic firm behavior in the presence of consumer learning about the uncertain quality differential of the products offered by a duopoly. It is found that consumers learn slowly and also that prices converge slowly to full-information levels. A consequence is that the incentives of firms to manipulate consumers' beliefs are relatively persistent. Although pricing tends to be aggressive at the early stages, and average prices eventually increase over time, price wars may occur at intermediate stages of the product life-cycle.

Campa, Jose M.

PD February 1997. TI The Evolving External Orientation of Manufacturing Industries: Evidence from Four Countries. AU Campa, Jose M.; Goldberg, Linda S. AA Campa: New York University and National Bureau of Economic Research. Goldberg: Federal Reserve Bank of New York and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5919; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 24. PR $5.00. JE F41, L60. KW International Finance. Macroeconomics. International Trade. Investment.

AB Significant changes in the external orientation of manufacturing industries are observed in the United States, Canada, and the United Kingdom, but not in Japan. The observed increases in external orientation are in terms of industry export shares, import penetration, and imported input use in production. United States industries have experienced a particularly dramatic increase in imported input use, accompanied by highly variable patterns of industry net external orientation over the past two decades. Although similar manufacturing industries have strong export orientation in all countries, across countries these same industries have profoundly different patterns of import penetration, imported input use, and net external exposure to exchange rate and trade policy changes.

PD March 1997. TI The Forecasting Ability of Correlations Implied in Foreign Exchange Options. AU Campa, Jose M.; Chang, P. H. Kevin. AA Campa: New York University and National Bureau of Economic Research. Chang: University of Southern California, Los Angeles. SR National Bureau of Economic Research Working Paper:

5974; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nbcr.org. PG 30. PR $5.00. JE F31, G13, G15. KW Asset Pricing. International Finance. Macroeconomics.
AB This paper evaluates the forecasting accuracy of correlation derived from implied volatilities in dollar-mark, dollar-yen, and mark-yen options from January 1989 to May 1995. As a forecast of realized correlation between the dollar-mark and dollar-yen, implied correlation is compared against three alternative forecasts based on time series data: historical correlation, RiskMetrics' exponentially weighted moving average correlation, and correlation estimated using a bivariate GARCH (1,1) model. At the one-month and three-month forecast horizons, we find that implied correlation outperforms, often significantly, these alternative forecasts. In combinations, implied correlation always incrementally improves the performance of other forecasts, but not the converse; in certain cases historically based forecasts contribute no incremental information to implied forecasts. The superiority of the implied correlation forecast holds even when forecast errors are weighted by realized variances, reflecting correlation's contribution to the dollar variance of a multicurrency portfolio.

Campbell, Jeffrey R.
PD March 1997. TI Entry, Exit, Embodied Technology, and Business Cycles. AA University of Rochester and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5955; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 35. PR $5.00. JE E22, E32, L16. KW Economic Fluctuations. Growth.
AB This paper studies the entry and exit of U.S. manufacturing plants over the business cycle and compares the results with those from a vintage capital model augmented to reproduce observed features of the plant life cycle. Looking at the entry and exit of plants provides new evidence supporting the hypothesis that shocks to embodied technological change are a significant source of economic fluctuations. In the U.S. economy, the entry rate covaries positively with output and total factor productivity growth, and the exit rate leads all three of these. A vintage capital model in which all technological progress is embodied in new plants reproduces these patterns. In the model economy, a persistent improvement to embodied technology induces obsolete plants to cease production, causing exit to rise. Later, as entering plants embodying the new technology become operational, both output and productivity increase.

Canziani, Paula
TI Partial De-Regulation: Fixed-Term Contracts in Italy and Spain. AU Adam, Paula; Canziani, Paula.

Card, David
PD February 1997. TI Immigrant Inflows, Native Outflows, and the Local Labor Market Impacts of Higher Immigration. AA Princeton University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5927; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 43. PR $5.00. JE J20, J61. KW Labor Studies.
AB This paper uses 1990 Census data to study the effects of

immigrant inflows on the labor market opportunities of natives and older immigrants. I divide new immigrants, older immigrants, and natives into distinct skill groups and focus on skill-group-specific outcomes within cities. An important first question is whether inflows of new immigrants lead to outflows of natives or earlier immigrants in the same skill groups. Even after accounting for endogenous mobility decisions I find that inter-city migration flows of natives and older immigrants are largely unaffected by new immigrant inflows. Inflows of new immigrants are associated with lower employment rates among natives and earlier immigrants, but with relatively small effects on the relative wage structure. The estimates imply that immigrant arrivals between 1985 and 1990 depressed the employment rate of low-skilled natives in major U.S. cities by 1-2 percentage points on average, and by substantially more in high-immigrant cities.

Carter, Susan B.
PD December 1997. TI Historical Perspectives on the Economic Consequences of Immigration into the United States. AU Carter, Susan B.; Sutch, Richard. AA Carter: University of California, Riverside. Sutch: University of California, Berkeley and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 106; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE J61, N11, N12, N31, N32. KW Economic History. Immigration. Labor Markets. Productivity.
AB This paper highlights the distinctive features of the theoretical approach taken by scholars who analyzed the impacts of the mass migration into the United States in the two decades preceding World War I. Broadly speaking, this literature was couched in terms of the "aggregate production function," and emphasized advancing technology, productivity change, and changes in factor proportions. Attention was focused on the close interrelatedness among the many diverse elements in the economy. A notable difference between the historical studies and the recent literature on the impacts of immigration is the propensity of the current literature to concentrate only on the first-round consequences. It is easy to show that these will be harmful to resident workers who face direct competition. Economic historians writing about the earlier period of high immigration went beyond the first-round effects. Taking a long-run perspective, they identified many aspects of the mass immigration that were beneficial.

Casella, Alessandra
PD November 1997. TI Anonymous Market and Group Ties in International Trade. AU Casella, Alessandra; Rauch, James E. AA Casella: Columbia University. Rauch: University of California, San Diego. SR Centre for Economic Policy Research, Discussion Paper: 1748; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 38. PR 5 pounds or $10.00. JE C78, F12, F23. KW Matching. International Trade. Informational Barriers. Groups. Markets.
AB When trade involves differentiated products, preferential ties to a group settled abroad facilitate an exporter's entry into the foreign market by providing information and access to distribution channels. This contrasts with the difficulties

experienced by an unattached producer unfamiliar with the foreign environment. Inspired by the role of coethnic ties and business groups in East Asia, we build a simple general equilibrium model of trade that formalizes this simple idea. Output is generated through bilateral matching of agents spanning a spectrum of types. Domestic matching is perfect -- every trader knows the type of all others and can approach any, but international matching is random -- every trader lacks the information to choose a partner's type. Group ties, however, allow perfect matching abroad to a minority of individuals who have access to them and can decide. whether or not to exploit them. We show that in the absence of ties the existence of informational barriers reduces the volume of trade. By increasing trade, group ties are beneficial to the economy as a whole, but have significant distributional effects. On average, group members benefit, but some may lose; non-members lose almost without exception, while the largest losses are concentrated among those with the poorest domestic market niches.

Chamberlain, Gary

PD August 1996. **TI** Nonparametric Applications of Bayesian Inference. **AU** Chamberlain, Gary; Imbens, Guido W. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 200; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** $5.00. **JE** C11, C14, D81. **KW** Bayesian Inference. Nonparametric Methods. Uncertainty. Decision Making. Quantile Regression.
AB The paper evaluates the usefulness of a nonparametric approach to Bayesian inference by presenting two applications. The approach is due to Ferguson (1973, 1974) and Rubin (1981). The first application considers an educational choice problem. The authors focus on obtaining a predictive distribution that incorporates the parameter uncertainty, so that it is relevant for decision making under uncertainty in the expected utility framework of microeconomics. The second application is to quantile regression. The point here is to examine the potential of the nonparametric framework to provide inferences without making asymptotic approximations. Unlike in the first application, the standard asymptotic normal approximation turns out to not be a good guide. The authors also consider a comparison with a bootstrap approach.

PD September 1996. **TI** Hierarchical Bayes Models With Many Instrumental Variables. **AU** Chamberlain, Gary; Imbens, Guido W. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 204; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** $5.00. **JE** C11, I21. **KW** Bayesian Inference. Instrumental Variables. Education. Posterior Distributions.
AB This paper explores Bayesian inference in models with many instrumental variables that are potentially weakly correlated with the endogenous regressor. The prior distribution has a hierarchical (nested) structure. The authors apply the methods to the Angrist-Krueger (AK, 1991) analysis of returns to schooling using instrumental variables formed by interacting quarter of birth with state/year dummy variables. Bound, Jaeger, and Baker (1995) show that randomly generated instrumental variables, designed to match the AK data set, give two- stage least squares results that look similar to the results based on the actual instrumental variables. Using a hierarchical model with the AK data, the authors find a posterior distribution for the parameter of interest that is tight and plausible. Using data with randomly generated instruments, the posterior distribution is diffuse. Most of the information in the AK data can in fact be extracted with quarter of birth as the single instrumental variable.

Chang, P. H. Kevin

TI The Forecasting Ability of Correlations Implied in Foreign Exchange Options. **AU** Campa, Jose M.; Chang, P. H. Kevin.

Chase, Robert S.

PD November 1995. **TI** Women's Labor Force Participation During and After Communism: A Case Study of the Czech Republic and Slovakia. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 768; Yale University, Economic Growth Center P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. **PG** 41. **PR** $2.00 plus postage. **JE** J16, J21, J22, J31. **KW** Transitional Economies. Czech Republic. Slovakia. Labor Force. Women.
AB This research uses four micro-data sets to examine differences in married women's labor force participation between Communist and post- Communist Czech Republic and Slovakia. Descriptive statistics show that participation has dropped in both regions following the regime change, particularly for young women. To explain this phenomenon, one hypothesis is that own and spouse wage elasticities of participation are the same during and after Communism and the behavior change results from different offered wages. An alternative hypothesis is that wage elasticities changed. We expect higher elasticities in the regime which offers a broader set of options to families making time allocation decisions. Rejecting the hypothesis that elasticities are unchanged, the analysis uses probits stratified by age to examine own and spouse earnings effects on participation. While own earnings effects rose after Communism in Slovakia, they dropped in the Czech Republic, suggesting that constraints on married women's participation have increased there.

PD November 1996. **TI** Baby Boom or Bust? Changing Fertility in Post-Communist Czech Republic and Slovakia. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 769; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. **PG** 40. **PR** $2.00 plus postage. **JE** J13, J31. **KW** Transitional Economies. Fertility. Czech Republic. Slovakia.
AB Transition from a centrally planned to a market oriented economy alters the incentives individuals face as they make consumption and time allocation decisions. Families must reevaluate their fertility plans as a result of new wage structures, reduced government subsidies of the costs of raising children, and uncertainty from a changed economic environment. Using micro-data from 1984 and 1993 in the Czech Republic and Slovakia, this paper estimates a dynamic stock adjustment model, relating observed drops in fertility post-Communism to new wages, prices, and risks. Because transition will have affected only those born in the three years prior to the 1993 data, considering children both under and over age three isolates the effects of transition. Earnings influence

total demand for children during Communism through substitution effects for women's earnings and income effects for men's. In all four data sets, earnings levels have little effect on fertility timing.

PD January 1997. **TI** Markets for Communist Human Capital: Returns to Education and Experience in the Czech Republic and Slovakia. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 770; Yale University, Economic Growth Center P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. **PG** 37. **PR** $2.00 plus postage. **JE** I21, J24, J31. **KW** Transitional Economies. Czech Republic. Slovakia. Education. Experience.

AB This research examines differences in earnings structure between Communist and post-Communist Czech Republic and Slovkia using four sets of similar micro-data. It represents hypotheses about how earnings dispersion returns to education and returns to experience will change across regimes and tests those hypotheses using earnings equations. From approximately 2.5 percent in 1984, the return to education increased to approximately 5 percent by 1993. During that period, returns to experience fell. Though women have higher returns to education, returns for men increased more across regime change. Those with academic secondary education experienced a particularly large earnings increase. Earnings structure changes appear larger in the Czech Republic than in Slovakia.

Cheung, Yin-Wong

PD November 1996. **TI** Further Investigation of the Uncertain Unit Root in GNP. **AU** Cheung, Yin-Wong; Chinn, Menzie D. **AA** Cheung: University of California, Santa Cruz. Chinn: University of California, Santa Cruz and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 206; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nbcr.org. **PG** not available. **PR** $5.00. **JE** C15, C22, C52, E10, F30. **KW** Time Series. International Finance. Macroeconomics. Simulation. Unit Roots.

AB A more powerful version of the ADF test and a test that has trend stationarity as the null are applied to U.S. GNP. Simulated critical values generated from plausible trend and difference stationary models are used in order to minimize possible finite sample biases. The discriminatory power of the two tests is evaluated using alternative- specific rejection frequencies. For post-War quarterly data, these two tests do not provide a definite conclusion. However, when analyzing annual data over the 1869-1986 period, the unit root null is rejected, while the trend stationary null is not.

PD February 1997. **TI** Integration, Cointegration and the Forecast Consistency of Structural Exchange Rate Models. **AU** Cheung, Yin-Wong; Chinn, Menzie D. **AA** Cheung: University of California, Santa Cruz. Chinn: University of California, Santa Cruz and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5943; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nbcr.org. **PG** 29. **PR** $5.00. **JE** C22, C32, F31. **KW** International Finance. Macroeconomics.

AB Exchange rate forecasts are generated using some popular monetary models of exchange rates in conjunction with several estimation techniques. We propose an alternative set of criteria for evaluating forecast rationality which entails the following requirements: the forecast and the actual series i) have the same order of integration, ii) are cointegrated, and iii) have a cointegrating vector consistent with long run unitary elasticity of expectations. When these conditions hold, we consider the forecasts to be "consistent." We find that it is fairly easy for the generated forecasts to pass the first requirement. However, according to the Johansen procedure, cointegration fails to hold the farther out the forecasts extend. At the one year ahead horizon, most series and their respective forecasts do not appear cointegrated. Of the cointegrated pairs, the restriction of unitary elasticity of forecasts with respect to actual appears not to be rejected in general. The exception to this pattern is in the case of the error correction models in the longer subsample. Using the Horvath- Watson procedure, which imposes a unitary coefficient restriction, we find fewer instances of consistency, but a relatively higher proportion of the identified cases of consistency are found at the longer horizons.

Chinn, Menzie D.

TI Further Investigation of the Uncertain Unit Root in GNP. **AU** Cheung, Yin-Wong; Chinn, Menzie D.

TI Integration, Cointegration and the Forecast Consistency of Structural Exchange Rate Models. **AU** Cheung, Yin-Wong; Chinn, Menzie D.

Choi, Jay Pil

PD May 1998. **TI** Tying and Innovation: A Dynamic Analysis of Tying Arrangements. **AA** Columbia University. **SR** Columbia University, Department of Economics Discussion Paper Series: 9798/15; Department of Economics, Columbia University, 420 West 118 Street, Room 1022 IAB, New York, NY 10027. Website: www.columbia.edu/cu/economics. **PG** 27. **PR** $4.00 U.S.; $5.00 Canada; $7.00 All other countries. **JE** L13, L41, O31. **KW** Tying Arrangements. Research and Development. Incentives. Dynamic Leverage. Market Foreclosure.

AB This paper analyzes the effects of tying arrangements on R&D incentives. It shows that tying is a means through which a firm can commit to more aggressive R&D investment in the tied goods market. Tying also has the strategic effect of reducing rivals' incentives to invest in R&D. The strategy of tying is a profitable one if the gains, via an increased share of dynamic rents in the tied goods market, exceed the losses that result from intensified price competition in the market. The welfare implications of tying, and consequently the appropriate antitrust policy, are shown to depend on the nature of R&D competition.

PD September 1998. **TI** The Economics of Repeated Extortion. **AU** Choi, Jay Pil; Thum, Marcel. **AA** Choi: Columbia University. Thum: University of Munich. **SR** Columbia University, Department of Economics Discussion Paper Series: 9899/03; Department of Economics, Columbia University, 420 West 118 Street, Room 1022 IAB, New York, NY 10027. Website: www.columbia.edu/cu/economics. **PG** 26. **PR** $4.00 U.S.; $5.00 Canada; $7.00 All other countries. **JE** D72, D92, H25, K40, L15. **KW** Corruption. Repeated Extortion. Dynamic Consistency. Cream Skimming. Expropriation.

AB This paper provides a simple model of repeated extortion. In particular, the authors ask whether corrupt government officials' ex post opportunism to demand more once

entrepreneurs have made sunk investments entails further distortion in resource allocations. The authors show that the inability of government officials to commit to future demands does not distort entry decisions any further if technology is not a choice variable for the entrepreneurs. The government official can properly discount the initial demand in order to induce the appropriate amount of entry. If, however, the choice of technology is left to the entrepreneurs, the dynamic path of demand schedules will induce entrepreneurs to pursue a "fly-by-night" strategy by adopting a technology with an inefficiently low sunk cost component. In this case, the authors show that the unique equilibrium is characterized by a mixed strategy of the government official in future demand.

Christiano, Lawrence J.

PD October 1997. TI Algorithms for Solving Dynamic Models with Occasionally Binding Constraints. AU Christiano, Lawrence J.; Fisher, Jonas D. M. AA Christiano: Northwestern University and National Bureau of Economic Research. Fisher: Federal Reserve Bank of Chicago. SR National Bureau of Economic Research Technical Paper: 218; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE C61, C63, C68, O41. KW Economic Fluctuations. Growth. Inequality Constraints. Algorithms.
AB The authors describe and compare several algorithms for approximating the solution to a model in which inequality constraints occasionally bind. Their performance is evaluated and compared using various parameterizations of the one sector growth model with irreversible investment. The authors develop parameterized expectation algorithms which, on the basis of speed, accuracy and convenience of implementation, appear to dominate the other algorithms.

PD February 1998. TI Solving Dynamic Equilibrium Models by a Method of Undetermined Coefficients. AA Northwestern University and National Bureau of Economic Research. SR National Bureau of Economic Research Technical Paper: 225; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE C51, C63, C68. KW Undetermined Coefficients. Rational Expectations. Impulse Response. Dynamic Equilibrium. Computational Techniques.
AB The author presents an undetermined coefficients method for obtaining a linear approximation to the solution of a dynamic, rational expectations model. The author also shows how that solution can be used to compute the model's implications for impulse response functions and for second moments.

Christodoulakis, Nicos M.

PD August 1997. TI Heterogeneous Traders and the Unbiasedness Hypothesis: Explaining the Mark/Dollar Bias. AU Christodoulakis, Nicos M.; Kalyvitis, Sarantis C. AA Athens University of Economics and Business. SR Centre for Economic Policy Research, Discussion Paper: 1683; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 28. PR 5 pounds or $10.00. JE F31, G14. KW Exchange Rate. Market Efficiency. Heterogeneous Traders.
AB This paper re-examines the standard 'unbiasedness'

hypothesis in foreign exchange markets, according to which the forward premium should be an unbiased predictor of the future change of the spot exchange rate. If traders are heterogeneous, they may consist of 'fundamentalists' who correctly forecast the future spot rate changes, and 'chartists' who use a different information set and pay attention to past exchange rate changes. In this case, the coefficient on the forward premium will deviate from its theoretical value, and will converge to one only if past spot rates are taken into account for the calculation of exchange rate changes and forward premia. The magnitude of the deviation and the speed of convergence are found to depend both on the proportion of each type of traders in the market and on the memory length of 'chartists'. The analysis is used to explain the bias in the Deutsche Mark/US Dollar exchange rate in the early 1990s and estimates the proportion of traders that is found to be consistent with the deviation from the unbiasedness hypothesis.

Christoffersen, Peter F.

PD October 1997. TI Cointegration and Long-Horizon Forecasting. AU Christoffersen, Peter F.; Diebold, Francis X. AA Christoffersen: International Monetary Fund. Diebold: University of Pennsylvania and National Bureau of Economic Research. SR National Bureau of Economic Research Technical Paper: 217; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE C52, C53. KW Cointegration. Forecasting. Horizon Length. Box-Jenkins.
AB The authors consider the forecasting of cointegrated variables, and they show that at long horizons nothing is lost by ignoring cointegration when forecasts are evaluated using standard multivariate forecast accuracy measures. In fact, simple univariate Box-Jenkins forecasts are just as accurate. Their results highlight a potentially important deficiency of standard forecast accuracy measures -- they fail to value the maintenance of cointegrating relationships among variables -- and the authors suggest alternatives that explicitly do so.

Clarida, Richard

PD November 1997. TI Monetary Policy Rules in Practice: Some International Evidence. AU Clarida, Richard; Gali, Jordi; Gertler, Mark. AA Clarida: Columbia University. Gali and Gertler: New York University. SR Centre for Economic Policy Research, Discussion Paper: 1750; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 37. PR 5 pounds or $10.00. JE E58, F41. KW Monetary Policy. Interest Rates. Exchange Rates.
AB This paper reports estimates of monetary policy reaction functions for two sets of countries: the G3 (Germany, Japan and the United States) and the E3 (France, Italy and the United Kingdom). It finds that since 1979 each of the G3 central banks has pursued an implicit form of inflation targeting, which may account for the broad success of monetary policy in those countries over this time period. The evidence also suggests that these central banks have been forward looking: they respond to anticipated inflation as opposed to lagged inflation. As for the E3, even prior to the emergence of the 'hard ERM', the E3 central banks were heavily influenced by German monetary policy. Further, using the Bundesbank's policy rule as a benchmark, we find that at the time of the EMS collapse,

interest rates in each of the E3 countries were much higher than domestic macroeconomic conditions warranted. Taken all together, the results lend support to the view that some form of inflation targeting may be superior to fixing exchange rates, as a means of gaining a nominal anchor for monetary policy.

Clouse, James A.
PD June 1997. TI Declining Required Reserves and the Volatility of the Federal Funds Rate. AU Clouse, James A.; Elmendorf, Douglas W. AA Federal Reserve Board. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/30; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 22. PR no charge. JE E43, E52, G21. KW Federal Funds Rate. Required Reserves. Banking.
AB Low required reserve balances in 1991 led to a sharp increase in the volatility of the federal funds rate, but similarly low balances in 1996 did not. This paper develops and simulates a microeconomic model of the funds market that explains these facts. The authors show that reductions in reserve balances increase the volatility of the federal funds rate, but that this relationship changes over time in response to observable changes in bank behavior. The model predicts that a continued decline in required reserves could increase funds-rate volatility significantly.

Cohen, Daniel
PD July 1997. TI How Will the Euro behave? AA Cohen: CEPREMAP. SR Centre for Economic Policy Research, Discussion Paper: 1673; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 32. PR 5 pounds or $10.00. JE F30, F40. KW Euro. Monetary Integration. Exchange Rates.
AB This paper investigates theoretically and empirically the effect on exchange rates of integrating monetary policy in Europe. It shows that the likely effect will be to generate a tighter European monetary policy (notwithstanding credibility aspects which are not discussed). The argument is that trade disequilibria will be less of a threat to European monetary policy than it is at the moment. Under certain circumstances, which are explored in the text, this could lead to a more volatile euro than we have currently (as a basket of currencies).

Collins, William J.
TI Were Trade and Factor Mobility Substitutes in History? AU O'Rourke, Kevin H.; Williamson, Jeffrey G.; Collins, William J.

Cooper, Russell W.
PD April 1997. TI Business Cycles: Theory, Evidence and Implications. AA Boston University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5994; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 44. PR $5.00. JE E32, E37, E44, E62. KW Economic Fluctuations. Growth.
AB This paper looks at recent advances in the study of aggregate fluctuations. Our emphasis is on three prominent areas of research: the stochastic growth model, economies which exhibit macroeconomic complementarities and models that emphasize heterogeneity. Each section of the paper outlines the theory, discusses relevant empirical evidence and then discusses some implications of the analysis.

Cordella, Tito
PD October 1997. TI Minimum Price Variations, Time Priority and Quote Dynamics. AU Cordella, Tito; Foucault, Thierry. AA Cordella: Universitat Pompeu Fabra, Foucault: Universitat Pompeu Fabra. SR Centre for Economic Policy Research, Discussion Paper: 1717; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 44. PR 5 pounds or $10.00. JE D43, G10. KW Market-Microstructure. Tick Size. Time Priority. Quote Formation. Trading Costs.
AB This paper analyses the impact of a minimum price variation (tick) and time priority on the quote dynamics and on trading costs when competition for the order flow is dynamic. It finds that convergence to competitive prices can take time and that the speed of convergence is influenced by the tick size, the priority rule and the characteristics of the order arrival process. It also shows that a zero minimum price variation is never optimal when competition for the order flow is dynamic. The paper compares the trading outcomes with and without time priority. It shows that, for reasonable parameterizations, time priority reduces trading costs because it prevents equilibria in which uncompetitive spreads can be sustained. Finally, the paper relates (a) the trading costs to the speed with which liquidity suppliers react to their competitors' offers and (b) the dynamics of the best price in the market to the state of the book.

Cornelli, Francesca
PD November 1997. TI Stage Financing and the Role of Convertible Debt. AU Cornelli, Francesca; Yosha, Oved. AA Cornelli: London Business School. Yosha: Brown University. SR Centre for Economic Policy Research, Discussion Paper: 1735; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 44. PR 5 pounds or $10.00. JE G24, G32. KW Window Dressing. Venture Capital. Convertible Debt. Short Termism.
AB Venture capital financing is characterized by extensive use of convertible debt and stage financing. The paper shows why convertible debt is better than a simple mixture of debt and equity in stage financing situations. When the venture capitalist retains the option to abandon the project, the entrepreneur has an incentive to engage in "window dressing" or short-termism, i.e. to bias positively the short- term performance of the project, in order to reduce the probability that the project will be liquidated. With a convertible debt contract, such behavior reduces the likelihood of liquidation, but increases the probability that the venture capitalist will convert debt into equity, reducing the entrepreneur's profits. With convertible debt, therefore, the entrepreneur will not engage in as much short-term behavior in terms of signal manipulation in comparison to a situation where only straight debt-equity financing is used.

Craig, Lee A.
PD April 1997. TI Nutritional Status and Agricultural Surpluses in the Antebellum United States. AU Craig, Lee

A.; Weiss, Thomas. **AA** Craig: North Carolina State University and National Bureau of Economic Research. Weiss: University of Kansas and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 99; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** $5.00. **JE** I12, N31, N51, Q11. **KW** Economic History. American Economy. Height. Nutrition. Agriculture.

AB The authors model the relationship between local agricultural surpluses, nutritional status, and height, and they test the hypothesis that adult height is positively correlated with the local production of nutrition in infancy. They test the hypothesis on two samples of Union Army recruits -- one consisting of white recruits and the other black recruits. The white sample shows that a local protein surplus one standard deviation above the mean yielded an additional 0.10 inches in adult height and that a similar deviation in surplus calorie production yielded an additional 0.20 inches. For blacks, however, the effect was probably negligible.

Crepon, Bruno

TI Moment Estimation with Attrition. **AU** Abowd, John M.; Kramarz, Francis; Crepon, Bruno.

Currie, Janet

PD April 1997. **TI** The Technology of Birth: Health Insurance, Medical Interventions, and Infant Health. **AU** Currie, Janet; Gruber, Jonathan. **AA** Currie: University of California, Los Angeles and National Bureau of Economic Research. Gruber: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5985; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 41. **PR** $5.00. **JE** I11, I18. **KW** Children. Health Care. Labor Studies. Public Economics.

AB Two key issues for public insurance policy are the effect of insurance status on medical treatment, and the implications of insurance-induced treatment differentials for health outcomes. We address these issues in the context of the treatment of childbirth, using Vital Statistics data on every birth in the U.S. over the 1987-1992 period. The effects of insurance status on treatment and outcomes are identified using the tremendous variation in eligibility for public insurance coverage under the Medicaid program over this period. Among teen mothers and high school dropouts, who were largely uninsured before being made eligible for Medicaid, eligibility for this program was associated with significant increases in the use of a variety of obstetric procedures. On average, this more intensive treatment was associated with only marginal changes in the health of infants, as measured by neonatal mortality. But the effect of eligibility on neonatal mortality is sizable among children born to mothers whose closest hospital had a Neonatal Intensive Care Unit, suggesting that insurance-induced increases in use of "high tech" treatments can have real effects on outcomes. Among women with more education, however, there is a countervailing effect on procedure use.

Cutler, David M.

PD February 1997. **TI** Reinsurance for Catastrophes and Cataclysms. **AU** Cutler, David M.; Zeckhauser, Richard J.

AA Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5913; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 39. **PR** $5.00. **JE** G12, G22, H10. **KW** Asset Pricing. Public Economics.

AB This paper examines the optimal design of insurance and reinsurance policies. We first consider reinsurance for "catastrophes:" risks which are large for any one insurer but not large for the reinsurance market as a whole. Reinsurance for catastrophes is complicated by adverse selection. Optimal reinsurance in the presence of adverse selection depends critically on the source of information asymmetry. When information on the probability of a loss is private but the magnitude of the loss is public, optimal reinsurance employs a deductible-style excess-of-loss policy. When information on the magnitude of a loss is private but the probability of a loss is common, optimal reinsurance covers small and large risks, but makes the primary insurer responsible for moderate risks. There is a dramatic divergence between these designs, which suggests that traditional, rule-of-thumb approaches to design are likely to be misguided. We then consider reinsurance for "cataclysms:" risks that are so large that a loss can threaten the solvency of reinsurance markets as a whole. Some cataclysms can arise from a single event, such as a major earthquake or hurricane, while others derive from common risks such as the liability revolution or escalating medical care costs. We argue that cataclysms must be reinsured in either broad securities markets or by the government.

TI Consolidation in the Medical Care Marketplace: A Case Study from Massachusetts. **AU** Barro, Jason R.; Cutler, David M.

PD September 1997. **TI** Restraining the Leviathan: Property Tax Limitation in Massachusetts. **AU** Cutler, David M.; Elmendorf, Douglas W.; Zeckhauser, Richard J. **AA** Elmendorf: Board of Governors of the Federal Reserve System. Cutler and Zeckhauser: Harvard University and National Bureau of Economic Research. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series: 1997/47; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 34. **PR** no charge. **JE** D72, H24, H41, H71, H72. **KW** Property Taxes. Agency Problems. Massachusetts. Voter Satisfaction. Local Government.

AB The authors examine the effects of Proposition 2-1/2 -- a property tax limitation law approved by Massachusetts voters in 1980 -- and assess voter satisfaction with these effects. They find that the Proposition had a smaller effect on local revenues and spending than expected, as a result of both amendments to the law and a strong economy. Voters in 1980 believed there was significant waste in local government, partly because of an inability to monitor local officials. Proposition 2-1/2 curbed these agency losses, but direct local override votes and municipal expenditure patterns imply that the Proposition initially reduced spending more than voters wanted.

Dahlquist, Magnus

TI Evaluating Portfolio Performance with Stochastic Discount Factors. **AU** Soderlind, Paul; Dahlquist, Magnus.

Das, Sanjiv Ranjan
PD June 1997. TI An Efficient Generalized Discrete-Time Approach to Poisson-Gaussian Bond Option Pricing in the Health-Jarrow-Morton Model. AA Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Technical Paper: 212; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE C63, E43, G13. KW Asset Pricing. Options. Term Structure. Volatility. Interest Rates.

AB Term structure models employing Poisson-Gaussian processes may be used to accommodate the observed skewness and kurtosis of interest rates. This paper extends the discrete-time, pure-Gaussian version of the Heath-Jarrow-Morton model to the pricing of American-type bond options when the underlying term structure of interest rates follows a Poisson-Gaussian process. The Poisson-Gaussian process is specified using a hexanomial tree (six nodes emanating from each node), and the tree is shown to be recombining. The scheme is parsimonious and convergent. This model extends the class of HJM models by (i) introducing a more generalized volatility specification than has been used so far, and (ii) inducting jumps, yet retaining lattice recombination, thus making the model useful for practical applications.

Daveri, Francesco
TI Unemployment, Growth and Taxation in Industrial Countries. AU Tabellini, Guido; Daveri, Francesco.

De Grauwe, Paul
PD July 1997. TI The Indeterminacy of the Euro Conversion Rates. Why it Matters and How it can be Solved. AA Katholicke Universiteit Leuven, Belgium. SR Centre for Economic Policy Research, Discussion Paper: 1677; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 24. PR 5 pounds or $10.00. JE F33, F36, F42. KW Monetary Integration. Maastricht Treaty. Exchange Rate.

AB The Maastricht Treaty and the Madrid Council decision severely restrict the choice of the euro conversion rates. In practical terms the authorities can only select the Ecu rates prevailing in the market the day before conversion. The market will lack a fixed point, however, so that infinite possible Ecu rates (and thus euro rates) could emerge. This indeterminacy problem is not solved by announcing fixed bilateral conversion rates in advance. The indeterminacy of the euro rates will spill over into an indeterminacy of the exchange rates of outside currencies with the EMU currencies (e.g. the dollar/DM rate). As a result, turbulence in these foreign exchange markets is likely during the approach to EMU. The emergence of speculative bubbles cannot be excluded. We discuss the possible solutions to this problem. They all involve steps towards providing an anchor in the foreign exchange markets.

De Jong, Douglas V.
TI Learning in Sender-Receiver Games. AU Blume, Andreas; De Jong, Douglas V.; Neumann, George R.; Savin, N. E.

de Melo, Jamie
PD June 1997. TI Globalization and Migratory Pressures from Developing Countries: A Simulation Analysis. AU de Melo, Jamie; Faini, Riccardo; Grether, Jean-Marie. AA de Melo: World Bank. Faini: Universita di Brescia. Grether: Universite de Geneve. SR Centre for Economic Policy Research, Discussion Paper: 1660; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 44. PR 5 pounds or $10.00. JE F20, O50. KW Migration. Risk-Aversion. Simulation.

AB We use a Ricardo-Viner model to study the determinants of the supply of outmigration in developing countries in a model with heterogeneous households. We assume that heterogeneity and migration costs prevent households from total migration. Data are calibrated to two archetypal developing economies (low-income and middle-income) to study how the supply of outmigration is affected by direct measures aimed at controlling migration (aid and increased migration costs) and indirect measures (commercial policy reform in the sending and receiving countries). We consider situations in which some households have a financial constraint on migration as well as situations of temporary and permanent migration. These simulations show that identical measures result in quite different patterns of migrations in each archetype and are sensitive to assumptions about the type of migration (permanent or not) and the possibility of financial constraints on migration.

de Roon, Frans A.
PD January 1998. TI Testing for Mean-Variance Spanning with Short Sales Constraints and Transaction Costs: The Case of Emerging Markets. AU de Roon, Frans A.; Nijman, Theo E.; Werker, Bas J. M. AA de Roon: Erasmus University. Nijman: CentER and Tilburg University. Werker: Universite Lebre de Bruxelles. SR Tilburg CentER for Economic Research Discussion Paper: 9807; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 47. PR no charge. JE C52, G11, G15. KW Short Sales. Transaction Costs. Emerging Markets. Mean-Variance Spanning. Intersection.

AB In this paper the authors propose tests for mean-variance spanning and intersection in case investors face market frictions such as short sales constraints and transaction costs. They show how regression techniques can be used to test for mean-variance spanning and intersection in case there are such frictions. The tests are applied to address the question of whether U.S. investors can extend their efficient set by investing in emerging markets in the presence of short sales constraints and transaction costs. The results show that although in the absence of market frictions mean-variance spanning of the emerging markets by three mature market indices is strongly rejected, the evidence that emerging markets provide significant diversification benefits is much weaker when short sales constraints, transaction costs and ownership restrictions are taken into account.

De Waegenaere, Anja
TI Optimal Design of Pension Funds: A Mission Impossible. AU Suijs, Jeroen; De Waegenaere, Anja; Borm, Peter.

Dehejia, Rajeev
PD May 1998. TI Propensity Score Matching Methods for Non-Experimental Causal Studies. AU Dehejia, Rajeev;

Wahba, Sadek. AA Dehejia: Columbia University. Wahba: Morgan Stanley & Co. SR Columbia University, Department of Economics Discussion Paper Series: 9899/01; Department of Economics, Columbia University, 420 West 118 Street, Room 1022 IAB, New York, NY 10027. Website: www.columbia.edu/cu/economics. PG 22. PR $4.00 U.S.; $5.00 Canada; $7.00 All other countries. JE C14, C81. KW Matching. Propensity Score. Observational Studies. Causal Inference.

AB This paper considers causal inference and sample selection bias in non-experimental settings in which: (i) few units in the non- experimental comparison group are comparable to the treatment units; and (ii) selecting a subset of comparison units similar to the treatment units is difficult because units must be compared across a high- dimensional set of pretreatment characteristics. The authors propose the use of propensity score matching methods, and implement them using data from the NSW experiment. Following Lalonde (1986), they pair the experimental treated units with non-experimental comparison units from the CPS and PSID, and compare the estimates of the treatment effect obtained using their methods to the benchmark results from the experiment. The authors show that the methods succeed in focusing attention on the small subset of the comparison units comparable to the treated units and, hence, in alleviating the bias due to systematic differences between the treated and comparison units.

DeJong, Douglas V.
TI Evolution of Communication With Partial Common Interest. AU Blume, Andreas; DeJong, Douglas V.; Kim, Yong-Gwan; Sprinkle, Geoffrey B.

Dekel, Eddie
PD November 1997. TI A Unique Subjective State Space for Unforeseen Contingencies. AU Dekel, Eddie; Lipman, Barton L.; Rustichini, Aldo. AA Dekel: Northwestern University. Lipman: University of Western Ontario. Rustichini: Universite Catholique de Louvain and CentER, Tilburg University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1202; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 46. PR $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. JE D81, D84. KW Unforeseen Contingencies. Preferences. Expected Utility.

AB The authors axiomatically characterize a representation of preferences over opportunity sets which exhibit a preference for flexibility, interpreted as a model of unforeseen contingencies. In this representation, the agent acts as if she had a coherent prior over a set of possible future preferences, each of which is an expected-utility preference. The authors show that the state space is essentially unique given the restriction that all future preferences are expected-utility preferences and is minimal even without this restriction. Finally, because the state space is identified, the additivity across states is meaningful in the sense that all representations are intrinsically additive.

Dellaert, Benedict G. C.
PD March 1998. TI Variations in Consumer Choice Consistency: The Case of Attribute-Level Driven Shifts in Consistency. AU Dellaert, Benedict G. C.; Brazell, Jeff D.; Louviere, Jordan J. AA Dellaert: CentER and Tilburg University. Brazell and Louviere: University of Sydney. SR Tilburg CentER for Economic Research Discussion Paper: 9829; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 18. PR no charge. JE D12, M31. KW Choice Consistency. Consumer Choice. Variance Functions. Heteroskedasticity. Logit.

AB In this paper, the authors study the effect of systematic shifts in product attribute levels on consumer choice consistency. The authors propose the size of the random error component in the consumer utility function as a measure of choice consistency: the smaller the random error component, the higher choice consistency. To capture this effect, they estimate a heteroskedastic logit model that incorporates the impact of (i) attribute level differences, and (ii) absolute attribute levels on the unexplained variance in the consumer utility function. An empirical illustration of the model is presented in a conjoint choice study that explores the impact of variations in product price differences and absolute product prices on consumer choice consistency.

PD March 1998. TI Consumer Choice of Modularized Products: A Conjoint Choice Experiment Approach. AU Dellaert, Benedict G. C.; Borgers, Aloys W. J.; Louviere, Jordan J.; Timmermans, Harry J. P. AA Borgers and Timmermans: Eindhoven University of Technology. Dellaert: CentER and Tilburg University. Louviere: University of Sydney. SR Tilburg CentER for Economic Research Discussion Paper: 9830; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 29. PR no charge. JE C90, D12, M31. KW Marketing. Consumer Choice. Conjoint Experiments. Heteroskedastic Logit. Customization.

AB Recent increases in flexibility and automation in the production of goods and services allow a growing number of suppliers to offer their products in flexible sets of modules from which consumers can create their own individualized packages. This paper addresses the question of how consumer choices of such modularized products can be modeled and measured by applying conjoint choice experiments. The authors analyze conceptually the structure of individual consumer's choices of modularized products and the role or the error component in random utility models of these choices. The authors propose a simple experimental conjoint choice design strategy that can support estimation of this type of models. An empirical illustration in the area of travel package choice is discussed.

Desai, Padma
PD October 1997. TI Russia's Market Transition: Who Has Lost and How? AU Desai, Padma; Idson, Todd. AA Columbia University. SR Columbia University, Department of Economics Discussion Paper Series: 9798/02; Department of Economics, Columbia University, 420 West 118 Street, Room 1022 IAB, New York, NY 10027. Website: www.columbia.edu/cu/economics. PG 37. PR $4.00 U.S.; $5.00 Canada; $7.00 All other countries. JE J22, J23, J63, J64. KW Labor Markets. Employment. Russia. Unemployment.

AB   In this paper, the authors analyze a variety of labor market adjustment issues facing Russian households from 1992 to 1996 on the basis of a panel data set which allows them to group the sample respondents by demographic, occupational and job location features. The authors employ multivariate specifications for analyzing patterns of job security and job replacement concerns, involuntary layoffs and voluntary quits, forced unpaid leave and its duration, monthly hours of work and short-time work, nonemployment spell and unemployment incidence as they affected the respondents selected by demographic characteristics, occupation, and region. Among their principals finding is that men and women had increased fears of job loss and increased pessimism about their reemployment prospects during the years considered here but women had borne a greater burden of the majority of the "quantity" of employment adjustments.

AB   This paper proposes an analytical framework suggesting that wage nonpayment in the Russian state sector and privatized factories, which resulted from acute cash flow problems in both, reflected an implicit contract among the government, managers and labor against worker layoff. They analyze the impact of wage nonpayment on workers grouped by demographic features, occupation and job location on the basis of a panel data set covering the years 1994 to 1996. Based on a multivariate specification that incorporates these features, the authors find that the frequency and amount of wage withholding increased sharply in 1996. While wages were denied less frequently and in lower amounts to low paid workers by age, occupation and location, this pattern needs to be confirmed with further statistical tests. While wage nonpayment tended to push families into poverty, it also raised the likelihood of workers holding additional jobs and undertaking informal paid activity.

AB   In this paper the authors investigate the decisions of Russian managers in distributing wage nonpayment in Russia during the 1994-96 period. Using a longitudinal survey of households, the authors identify a pattern of wage arrears across regions and industries which suggests that managers allocated nonpayment among workers so as to minimize the real wage declines experienced by higher productivity workers. This finding suggests that post-Soviet managers were responding more strongly to market incentives than to equity considerations in their wage withholding allocation decisions.

AB   This paper uses a longitudinal survey of Russian households for analyzing the impact of wage arrears on the incidence of poverty among families and their survival strategies. The failure of enterprises and government to fully pay workers in a timely fashion is shown to be associated with a higher incidence of poverty; a similar effect is found for pensioners experiencing pension arrears. As a result of pay delays, the authors find that individuals and families were more likely to take second jobs, increase home production for own-consumption and sale, reduce their rate of saving, sell family assets, and receive transfers of goods and money from relatives (which reduce the effect of wage nonpayment on poverty). Wage nonpayment also contributed to a rise in barter between workers and firms, although the monetary value of these goods and services did little to arrest the upward trend in outstanding net debt to workers.

Dhrymes, Phoebus J.

AB   The objective of this paper is to examine the recent literature on the standard open economy macro paradigm. Since there are many aspects to this literature, the authors concentrate on issues regarding the nature of restrictions imposed in order to gain identification, the general problem of identification in the context of the standard structural VAR (SVAR) or structural MARMA (SMARMA) model employed for that purpose, the question of whether looking (rational) expectations (FLE) are more in accord with empirical evidence than the standard looking (rational) expectational (BLE) schemes and, finally, whether the results one obtains are invariant to the choice of model specification as SVAR or SMARMA.

AB   This paper reports on the results of a Monte Carlo study. The latter investigates the performance of various versions of

the Conformity test (CCT) for the existence and rank of cointegration, as given in Dhrymes (1996b), the likelihood ratio test (LRT) as given in Johansen (J) (1988), (1991), and the stochastic trends test (SW), as given in Stock and Watson (1988).

Diebold, Francis X.

PD April 1997. TI Dynamic Equilibrium Economies: A Framework for Comparing Models and Data. AU Diebold, Francis X.; Ohanian, Lee E.; Berkowitz, Jeremy. AA Diebold: University of Pennsylvania and National Bureau of Economic Research. Ohanian: University of Minnesota and University of Pennsylvania. Berkowitz: Federal Reserve Board. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/23; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 23. PR no charge. JE C60, D50. KW Dynamic Equilibrium. Data. Bootstrap. Goodness-of-Fit. Loss Functions.
AB The authors propose a constructive, multivariate framework for assessing agreement between (generally misspecified) dynamic equilibrium models and data, which enables a complete second-order comparison of the dynamic properties of models and data. They use bootstrap algorithms to evaluate the significance of deviations between models and data, and they use goodness-of-fit criteria to produce estimators that optimize economically-relevant loss functions. The authors provide a detailed illustrative application to modeling the U.S. cattle cycle.

PD August 1997. TI Measuring Predictability: Theory and Macroeconomic Applications. AU Diebold, Francis X.; Kilian, Lutz. AA Diebold: University of Pennsylvania and National Bureau of Economic Research. Kilian: University of Michigan. SR National Bureau of Economic Research Technical Paper: 213; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE C53, E17, E37, O40. KW Economic Fluctuations. Growth. Predictability. Expected Loss.
AB The authors propose a measure of predictability based on the ratio of the expected loss of a short-run forecast to the expected loss of a long-run forecast. This predictability measure can be tailored to the forecast horizons of interest, and it allows for general loss functions, univariate or multivariate information sets, and stationary or nonstationary data. The authors propose a simple estimator, and they suggest resampling methods for inference. They then provide several macroeconomic applications. First, based on fitted parametric models, the authors assess the predictability of a variety of macroeconomic series. Second, they analyze the internal propagation mechanism of a standard dynamic macroeconomic model by comparing predictability of model inputs and model outputs. Third, they use predictability as a metric for assessing the similarity of data simulated from the model and actual data. Finally, the authors sketch several promising directions for future research.

PD October 1997. TI Evaluating Density Forecasts. AU Diebold, Francis X.; Gunther, Todd A.; Tay, Anthony S. AA Diebold: University of Pennsylvania and National Bureau of Economic Research. Gunther: University of Pennsylvania. Tay: National University of Singapore.

SR National Bureau of Economic Research Technical Paper: 215; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE C15, C52, C53, G10. KW Economic Fluctuations. Growth. Simulation. Density Forecasts. Stock Returns.
AB The authors propose methods for evaluating density forecasts. They focus primarily on methods that are applicable regardless of the particular user's loss function. The authors illustrate the methods with a detailed simulation example, and then they present an application to density forecasting of daily stock market returns. They discuss extensions for improving suboptimal density forecasts, multi-step-ahead density forecast evaluation, multivariate density forecast evaluation, monitoring for structural change and its relationship to density forecasting, and density forecast evaluation with known loss function.

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

Dixit, Avinash

PD March 1997. TI A Markup Interpretation of Optimal Rules for Irreversible Investment. AU Dixit, Avinash; Pindyck, Robert S.; Sodal, Sigbjorn. AA Dixit: Princeton University. Pindyck: Massachusetts Institute of Technology and National Bureau of Economic Research. Sodal: Agder College. SR National Bureau of Economic Research Working Paper: 5971; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 15. PR $5.00. JE D81, D92 E22. KW Industrial Organization. Productivity.
AB We re-examine the basic investment problem of deciding when to incur a sunk cost to obtain a stochastically fluctuating benefit. The optimal investment rule satisfies a trade-off between a larger versus a later net benefit; we show that this trade-off is closely analogous to the standard trade-off for the pricing decision of a firm that faces a downward sloping demand curve. We reinterpret the optimal investment rule as a markup formula involving an elasticity that has exactly the same form as the formula for a firm's optimal markup of price over marginal cost. This is illustrated with several examples.

Djankov, Simeom

PD August 1998. TI Disintegration. AU Djankov, Simeom; Freund, Caroline L. AA Federal Reserve Board. SR Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 618; Margaret Gray, Division of International Finance, Mail Stop 24. Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 43. PR no charge. JE F13, F15. KW Infrastructure. Trade. Adjustment Costs.
AB The authors study the effects of trade barriers and the persistence of past linkages on trade flows in the former Soviet Union (FSU). Estimating gravity equations on 1987-1996 trade among and between nine Russian regions and fourteen FSU republics, the authors find that Russian regions traded 60 percent more with each other than with republics in the reform period (1994-96). In contrast, they did not trade significantly more with each other than with republics in the pre-reform period (1987-90). Estimating a richer model, the authors find that trade barriers are primarily responsible for the current domestic bias. However, the existing infrastructure stock has significantly limited the recent reorientation in trade. Finally,

the authors find evidence of anticipatory adjustment during the transition to independence.

Djankov, Simeon

PD October 1997. TI Determinants of Intra-Industry Trade Between East and West Europe. AU Djankov, Simeon; Hoekman, Bernard; Aturupane, Chonira. AA Djankov: University of Michigan. Hoekman: World Bank. Aturupane: Stanford University. SR Centre for Economic Policy Research, Discussion Paper: 1721; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 40. PR 5 pounds or $10.00. JE F13. KW Intra-Industry Trade. Foreign Direct Investment. Eastern Europe.

AB The share of intra-industry trade (IIT) in total trade between Central and East European nations and the EU is among the highest of all the EU's bilateral trade flows. IIT is broken down into horizontal and vertical components and the determinants of each is investigated. Vertical IIT (exchange of similar goods of different quality) is found to account for 80-90% of total IIT and is positively associated with product differentiation, labor intensity of production, economies of scale, and foreign direct investment (FDI). Controlling for country effects, a statistically significant positive association is found between horizontal IIT (the exchange of close substitutes of similar quality) and FDI, product differentiation, and industry concentration; a significant negative relationship is found for scale and labor intensity. These results do not hold if country effects are not controlled for, suggesting that country-specific factors are key determinants of horizontal IIT. The estimation results are more robust than those in previous studies, reflecting the specific characteristics of the endowments of, and ongoing restructuring process in, transition economics.

PD October 1997. TI Competition Law in Post-Central Planning Bulgaria. AU Djankov, Simeon; Hoekman, Bernard. AA Djankov: University of Michigan. Hoekman: World Bank. SR Centre for Economic Policy Research, Discussion Paper: 1723; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 28. PR 5 pounds or $10.00. JE K21, L40. KW Competition Law. Antitrust. Bulgaria. Economies in Transition.

AB This paper investigates the activities of the Bulgarian competition office, the Commission for the Protection of Competition, during 1991-5. Descriptive statistics are provided on the industry incidence of investigations, the types of behavior that were investigated, and the frequency with which violations were found and penalties imposed. Although the Commission has attempted to concentrate its efforts in non-tradable sectors and target both cartel and abuse of dominance cases, the remedies that are imposed appear rather ineffective. Moreover, instead of hard core anti-competitive behavior, much of the Commission's activities have centered on 'unfair' competition (e.g. false advertising, trademark infringement, and the behavior of ex-employees of specific enterprises). Recently proposed amendments to the law should go some way towards allowing the Commission to focus more narrowly on anti-competitive practices and to strengthen the deterrent effect of the law.

Domino, Marisa E.

TI Within Group "Structural" Tests of Labor-Market Discrimination: A Study of Persons with Serious Disabilities. AU Salkever, David S.; Domino, Marisa E.

Doyle, Maura P.

PD July 1997. TI The Effects of Interest Rates and Taxes on New Car Prices. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series: 1997/38; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 39. PR no charge. JE E62, H22, L62. KW Sales Taxes. Car Prices. Interest Rates. Automobile Industry.

AB Utilizing the Consumer Expenditure Survey and state-level variation in taxes, this study finds that prices for most models of new cars shift by more than the amount of a sales tax. The evidence of an overshifting of prices offers support for the recent models of tax incidence in imperfectly competitive markets. The results also suggest that changes in the after-tax interest rate have offsetting effects on new car prices; a one percentage point increase in the after-tax real interest rate will prompt, on average, a mark-down of $106.

Drazen, Allan

TI Uncertain Duration of Reform: Dynamic Implications. AU Calvo, Guillermo A.; Drazen, Allan.

Dreze, Jacques H.

TI Continua of Underemployment Equilibria. AU Herings, P. Jean-Jacques; Dreze, Jacques H.

Droste, Edward

PD March 1998. TI Regret Equilibria in Games. AU Droste, Edward; Kosfeld, Michael; Voorneveld, Mark. AA CentER and Tilburg University. SR Tilburg CentER for Economic Research Discussion Paper: 9819; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 21. PR no charge. JE C72. KW Equilibrium. Regret. Procedural Rationality. Bounded Rationality. Game Theory.

AB The authors study boundedly rational players in an interactive situation. Each player follows a simple choice procedure in which he reacts optimally against a combination of actions of his opponents drawn at random from the distribution generated by a player's beliefs. By imposing a consistency requirement the authors obtain an equilibrium notion which they call regret equilibrium. An existence proof is provided and it is shown that the concept survives the iterated elimination of never-best responses. Additional properties are studied and the regret equilibrium concept is compared with other game theoretic solution concepts. The regret equilibrium concept is illustrated by means of interesting examples. It is shown that in the centipede game, players will continue to play with large probability.

Dufwenberg, Martin

PD March 1998. TI Price Competition and Market Concentration: An Experimental Study. AU Dufwenberg, Martin; Gneezy, Uri. AA Gneezy: University of Haifa. Dufwenberg: Uppsala University, Sweden. SR Tilburg CentER for Economic Research Discussion Paper: 9827; CentER for Economic Research, Tilburg University,

Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 20. PR no charge. JE C72, C90, L13. KW Market Concentration. Imperfect Competition. Experiments. Bounded Rationality. Bertrand Competition.

AB The classical price competition model (named after Bertrand), prescribes that in equilibrium prices are equal to marginal costs. Moreover, prices do not depend on the number of competitors. Since this outcome is not in line with real-life observation, it is known as the "Bertrand Paradox". Many theoretical problems with the original model have been considered as an explanation of the paradox in the literature. In this paper the authors experimentally investigate a model which is immune to the theoretical critique of the original model. They find, nevertheless, that the outcome does depend on the number of competitors: the Bertrand solution does not predict well when the number of competitors is two, but after some opportunities for learning are provided it tends to predict well when the number of competitors is three or four. A bounded rationality explanation of this is suggested.

Dumas, Bernard

PD April 1998. TI Efficient Intertemporal Allocations with Recursive Utility. AU Dumas, Bernard; Uppal, Raman; Wang, Tan. AA Dumas: HEC School of Management, France and National Bureau of Economic Research. Uppal: Massachusetts Institute of Technology. Wang: University of British Columbia. SR National Bureau of Economic Research Technical Paper: 231; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE C61, D61, D81, D91. KW Allocative Efficiency. Decision Making. Value Functions. Dynamic Programming. Recursive Utility.

AB In this article, the authors objective is to determine efficient allocations in economies with multiple agents having recursive utility functions. Their main result is to show that in a multi-agent economy the problem of determining efficient allocations can be characterized in terms of a single value function (that of a social planner) rather than multiple functions (one for each investor), as has been proposed thus far (Duffie, Geoffard and Skiadas (1994)). The authors then show how the single value function can be identified using the familiar technique of stochastic dynamic programming. They achieve these goals by first extending to a stochastic environment Geoffard's (1996) concept of variational utility and his result that variational utility is equivalent to recursive utility, and then using these results to characterize allocations in a multi-agent setting.

Dupont, Dominique

PD August 1997. TI Trading Volume and Information Distribution in a Market-Clearing Framework. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series: 1997/41; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 41. PR no charge. JE G12, G14. KW Trading Volume. Information. Financial Markets.

AB This paper investigates the relations between aggregate trading volume and information on financial markets from a theoretical standpoint. Through numerical examples, it relates some statistics describing equilibrium price and volume -- such as the variance of the price and its correlation with the true asset value, the volume mean, variance, skewness, and kurtosis -- to the distribution of information across traders. The analysis is carried out in a static noisy rational expectations framework, with multiple informed traders, where both the precision and the correlation of the signals observed by the traders can be modified.

Duranton, Gilles

PD July 1998. TI The Economics of Productive Systems: Segmentation and Skill-Biased Change. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 398; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 28. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE D31, J21, J31, L23, O33. KW Productive Systems. Skill. Segmentation. Production. Technology.

AB In this paper the authors introduce the concept of productive systems. Assuming a complementarity between skills and technology (more "complex" technologies are intrinsically more productive but they require a more skilled labor force) and gains from the division of labor, firms face a trade-off between simple technologies for which the labor force is abundant and more complex technologies with less division of labor. In equilibrium, the economy is partitioned into productive systems working at different levels of complexity. The distribution of skills determines the boundaries of the productive systems, which in turn determine the wages. Thus, changes in the distribution of skills can have a dramatic effect upon wage inequalities. In particular an increase in skilled workers can induce first higher wages for all workers and then higher wages for the skilled but lower wages for the unskilled. This seems consistent with the recent evolution of the U.S. labor market.

PD September 1998. TI Globalisation, Productive Systems and Inequalities. AA Centre for Economic Performance and London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 401; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 20. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE F12, F15, J21, J24. KW Productive Systems. Globalization. Labor Markets. Skill. Trade.

AB Using the idea that the division of labor is limited not only by the extent of the market but also by its heterogeneity, it is proposed in this paper that "globalization" is redrawing the lines of division within and between countries. The authors' model builds on the concept of productive systems. Their results indicate that progressive trade integration among "similar" countries leads first to disparities between countries and then to convergence between nations but also to inequalities within nations (thus possibly accounting for the deterioration of the labor market situation of the unskilled). It is also shown that trade integration among rich economies and/or rising skills therein can lead to the marginalization of poorer countries (thus possibly accounting for the convergence of countries in the world economy towards a twin-peaked

distribution and the delinking of some countries from the world trading system).

Durbin, J.
TI   Fast Filtering and Smoothing for Multivariate State Space Models. AU   Koopman, Siem Jan; Durbin, J.

Durlauf, Steven N.
PD   September 1996. TI   Statistical Mechanics Approaches to Socioeconomic Behavior. AA   University of Wisconsin and National Bureau of Economic Research. SR   National Bureau of Economic Research Technical Paper: 203; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG   not available. PR $5.00. JE   C10, C25, J10. KW   Statistical Mechanics. Socioeconomic Behavior. Interactions Models.
AB   This paper provides a unified framework for interpreting a wide range of interactions models which have appeared in the economics literature. A formalization taken from the statistical mechanics literature is shown to encompass a number of socioeconomic phenomena ranging from out of wedlock births to aggregate output to crime. The framework bears a close relationship to econometric models of discrete choice and therefore holds the potential for rendering interactions models estimable. A number of new applications of statistical mechanics to socioeconomic problems are suggested.

PD   March 1998. TI   The New Empirics of Economic Growth. AU   Durlauf, Steven N.; Quah, Danny. AA   Durlauf: University of Wisconsin. Quah: London School of Economics. SR   London School of Economics, Centre for Economic Performance Discussion Paper: 384; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG   87. PR   5 pounds for individual copies; 95 pounds for yearly subscription. JE   C20, D30, E13, O30, O41. KW   Growth. Convergence. Distribution Dynamics. Time Series. Panel Data.
AB   The authors provide an overview of recent empirical research on patterns of cross-country growth. The new empirical regularities considered differ from earlier ones, e.g. the well-known Kaldor stylized facts. The new research no longer makes production function accounting a central part of the analysis. Instead, attention shifts more directly to questions like, Why do some countries grow faster than others? It is this changed focus that, in the authors' view, has motivated going beyond the neoclassical growth model.

Dustmann, C.
PD   March 1998. TI   School Quality, Exam Performance, and Career Choice. AU   Dustmann, C.; Rajah, N.; van Soest, Arthur. AA   Dustmann: University College London and Institute for Fiscal Studies. Rajah: Institute for Fiscal Studies. van Soest: CentER and Tilburg University. SR   Tilburg CentER for Economic Research Discussion Paper: 9816; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG   31. PR   no charge. JE   C35, I20, J24. KW   School Inputs. Educational Attainment. Training.
AB   The purpose of this paper is to examine the effects of school quality on performance in national exams and the career decision at age 16. The authors use micro data for the UK, which provides a rich set of variables on parental background, previous achievements, and community variables. They find that, conditional on school type, the pupil-teacher ratio has no effect on examination performance. The pupil-teacher ratio has an effect on the career decision at age 16 as to whether to remain in full time education beyond the minimum age, enroll in training activities, or join the labor market full time. This finding appears to be very robust, and sustains when school type variables, exam results, and ability are controlled for.

Earle, John S.
PD   December 1997. TI   After Voucher Privatization: The Structure of Corporate Ownership in Russian Manufacturing Industry. AU   Earle, John S.; Estrin, Saul. AA   Earle: Stockholm School of Economics. Estrin: London Business School. SR   Centre for Economic Policy Research, Discussion Paper: 1736; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG   96. PR   5 pounds or $10.00. JE   C30, G32, L10, L32, L33, P20, P31. KW   Corporate Governance. Privatization. Russia. Ownership. Restructuring. Transition.
AB   This paper analyzes the ownership structure emerging from the Russian privatization process, using information from a sample survey of 439 state and privately-owned manufacturing companies conducted in July 1994, just after the voucher program was completed. The Russian ownership structure calls for a new approach to the analysis of corporate control because of the presence of multiple types of owners pursuing conflicting objectives and facing different constraints, and because of the weakness of other corporate governance mechanisms in the Russian economy. We distinguish four important categories of owners: the state, workers, managers, and outside investors. Our empirical results include new findings on the distribution of ownership across these categories, on the implications of alternative privatization methods for ownership structure, on the incidence of non-voting and voting shares, and on the extent of concentration of ownership within groups. As potential determinants of the ownership structure, we investigate measures of the size, complexity, capital intensity, and industrial relations of firms, the impact of regulation and other state actions, and the heterogeneity of the firm's productive activities and of its work-force. Finally, we examine the effects of ownership structure on enterprise performance, measured by labor productivity, several types of restructuring, and an overall index of restructuring activity.

Edison, Hali J.
PD   April 1988. TI   U.S. Monetary Policy and Econometric Modeling: Tales From the FOMC Transcripts 1984-1991. AU   Edison, Hali J.; Marquez, Jaime. AA   Federal Reserve Board. SR   Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 607; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG   27. PR   no charge. JE   C50, E52, E65. KW   FOMC. Econometric Modeling. Monetary Policy. United States.
AB   This paper uses the transcripts from the FOMC meetings to characterize the interactions between policymakers and macro models in the formulation of U.S. monetary policy. The

authors develop a taxonomy of these interactions and present two case studies. The first case focuses on the debate on the choice of monetary target and the second case focuses on the 1990/1991 recession. The analysis reveals that U.S. monetary policy relies on models for information. Models give estimates of both the outlook and the response of the economy to policy changes. Models also evolve to recognize the changing context in which policymakers operate exchange rate flexibility, financial deregulation, and international trade agreements.

TI Was China the First Domino? Assessing Links Between China and the Rest of Emerging Asia. **AU** Fernald, John; Edison, Hali J.; Loungani, Prakash.

PD March 1998. **TI** Asset Bubbles, Domino Effects and "Lifeboats": Elements of the East Asian Crisis. **AU** Edison, Hali J.; Luangaram, Pongsak; Miller, Marcus. **AA** Edison: Board of Governors of Federal Reserve Board. Luangaram: Bristol University. Miller: University of Warwick. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 606; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551.Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 33. **PR** no charge. **JE** E52, F31, F36, G10. **KW** Asset Prices. Price Bubbles. Financial Crisis. Illiquidity. Insolvency.
AB Credit market imperfections have been blamed for the depth and persistence of the Great Depression in the USA. Could similar mechanisms have played a role in ending the East Asian miracle? The authors use a model of highly levered credit-constrained firms due to Kiyotaki and Moore (1997) to explore this question. As applied to land-holding property companies, it predicts greatly amplified responses to financial shocks. The initial fall in asset values is followed by the knock-on effects of the scramble for liquidity as companies sell land to satisfy their collateral requirements. This could lead to financial collapse where prudent firms are brought down by imprudent firms. Key to avoiding collapse is the nature of financial stabilization policy; in a crisis, temporary financing can prevent illiquidity becoming insolvency and so can launching lifeboats. But the vulnerability of financial systems to short-term foreign currency exposure suggests that preventive measures are also required.

Edwards, Sebastian
PD March 1997. **TI** Banks and Macroeconomic Disturbances Under Predetermined Exchange Rates. **AU** Edwards, Sebastian; Vegh, Carlos A. **AA** Edwards: University of California, Los Angeles and National Bureau of Economic Research. Vegh: University of California, Los Angeles. **SR** National Bureau of Economic Research Working Paper: 5977; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** $5.00. **JE** E30, F31, F41. **KW** International Finance. Macroeconomics.
AB As the recent Mexican crisis vividly illustrates, Latin American countries often go through boom-bust cycles caused by both domestic policies and external shocks. Such cycles are typically magnified by weak banking systems which intermediate large capital inflows. This paper develops a simple optimizing model to analyze how the banking sector affects the propagation of shocks. In particular, we show how the world business cycle and shocks to the banking system affect output and employment through fluctuations in bank credit. We also

analyze the countercyclical use of reserve requirements. Econometric evidence for Chile and Mexico supports the main predictions of the model.

PD March 1997. **TI** Openness, Productivity and Growth: What Do We Really Know? **AA** University of California, Los Angeles and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5978; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 20. **PR** $5.00. **JE** F13, F43. **KW** International Finance. Macroeconomics. International Trade. Investment.
AB For over a century social analysts have debated the connection between trade policy and economic performance. This controversy continues today, even as the world is experiencing an unprecedented period of trade liberalization, and in spite of numerous empirical studies that claim controversies: first, until recently theoretical models had been unable to link trade policy to faster equilibrium growth. And second, the empirical literature on the subject has been affected by serious data problems. In this paper I use a new comparative data set for 93 countries to analyze the robustness of the relationship between openness and TFP growth. I use nine alternative indexes of trade policy to investigate whether the evidence supports the view that, with other things given, TFP growth is faster in more open economies. The regressions reported here are robust to the use of openness indicator, estimation technique, time period and functional form, and suggest that more open countries have indeed experienced faster productivity growth. Although the use of instrumental variables goes a long way towards dealing with endogeneity, issues related to causality are still somewhat open, and will require time series analyses to be adequately addressed.

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

Eijffinger, Sylvester
TI Incentive Contracts for Central Bankers Under Certainty: Walsh-Svensson Non-Equivalence Revisited. **AU** Schaling, Eric; Hoeberichts, Marco; Eijffinger, Sylvester.

Ellison, Martin
PD July 1998. **TI** Sticky Prices and Volatile Output: Or when is a Phillips Curve not a Phillips Curve? **AU** Ellison, Martin; Scott, Andrew. **AA** London School of Economics and Centre for Economic Performance. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 396; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 23. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** E31, E32, E51, O41. **KW** Price Rigidities. Business Cycles. Growth. United Kingdom.
AB The authors examine the effect of introducing price stickiness into a stochastic growth model subject to a cash in advance constraint. As has been previously documented the introduction of price rigidities provides a substantial source of monetary non-neutrality, leads to a strong positive correlation between inflation and output and contributes significantly to output volatility. However, the authors find that this increased

volatility arises mostly at the higher than business cycle frequencies, leads to lower persistence in output fluctuations and causes a deterioration in the ability of the model to explain U.K. data at all frequencies but especially over the business cycle. As noted by Chari, Kehoe and McGratten (1996) this failure of exogenous price stickiness to cause persistent output fluctuations is due to strongly pro-cyclical marginal costs. The authors' results clearly show that in the context of their model adding price rigidities is not sufficient to account for business cycle fluctuations.

Elmendorf, Douglas W.

TI   Declining Required Reserves and the Volatility of the Federal Funds Rate. AU   Clouse, James A.; Elmendorf, Douglas W.

TI   Restraining the Leviathan: Property Tax Limitation in Massachusetts. AU   Cutler, David M.; Elmendorf, Douglas W.; Zeckhauser, Richard J.

Ely, Jeffrey C.

PD   August 1997. TI   Nash Equilibrium and the Evolution of Preferences. AU   Ely, Jeffrey C.; Yilankaya, Okan. AA   Northwestern University. SR   Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1191; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 19. PR $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. JE   C70. KW Fitness. Evolution. Preferences. Game Theory.
AB   A population of players is randomly matched to play a normal form game G. The payoffs in this game represent the fitness associated with the various outcomes. Each individual has preferences over the outcomes in the game and chooses an optimal action with respect to those preferences. However, these preferences need not coincide with the fitness payoffs. When evolution selects individuals on the basis of the fitness of the actions they choose, the distribution of aggregate play must be a Nash equilibrium of G. Weak additional assumptions on the evolutionary process imply perfect equilibrium.

Encinosa III, William E.

PD   March 1997. TI   The Sociology of Groups and the Economics of Incentives: Theory and Evidence on Compensation Systems. AU   Encinosa III, William E.; Gaynor, Martin; Rebitzer, James B. AA   Encinosa III: School of Public Health, University of Michigan. Gaynor: Carnegie Mellon University and National Bureau of Economic Research. Rebitzer: Massachusetts   Institute   of   Technology. SR   National Bureau of Economic Research Working Paper: 5953; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 40. PR $5.00. JE   D23, I10, L21. KW Health Care.
AB   This paper incorporates the sociological concept of "group norms" into an economic analysis of pay systems. We use a behavioral microeconomic model and a unique survey of medical groups to examine the theoretical and empirical relationship between group norms and incentive pay. Our findings suggest that, at least for medical groups, norms are binding constraints in the choice of pay practices. While group

norms matter, the patterns in the data suggest that they are not all that matters. Analysis of the preferences and activities of individual physicians indicate that factors highlighted by the economic theory of agency, notably income insurance and multi-task considerations, also shape pay policies. The conclusion we draw from these results is that the sociological concept of group norms augments rather than replaces more conventional economic analyses of pay practices.

Ericsson, Neil R.

PD   November 1997. TI   The Demand for Broad Money in the United Kingdom, 1878-1993. AU   Ericsson, Neil R.; Hendry, David F.; Prestwich, Kevin M. AA   Ericsson and Prestwich: Federal Reserve Board. Hendry: Nuffield College. SR   Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 596; Margaret Gray, Division of International Finance. Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG   38. PR no charge. JE   C52, E41, E52. KW Constancy. Financial Innovation. Money. Demand.
AB   Using annual data from Friedman and Schwartz (1982), Hendry and Ericsson (1991a) developed an empirical model of the demand for broad money in the United Kingdom over 1878-1975. The authors update that model over 1976-1993, accounting for changed data definitions and clarifying the concept of constancy. With appropriate measures of opportunity cost and credit deregulation, the model's parameters are empirically constant over the extended sample, which was economically turbulent. Policy implications follow for parameter nonconstancy and predictive failure, causation between money and prices, monetary targeting, deregulation and financial innovation, and the effect of policy on economic agents' behavior.

PD   June 1998. TI   Exogeneity, Cointegration, and Economic Policy Analysis. AU   Ericsson, Neil R.; Hendry, David F.; Mizon Grayham E. AA   Ericsson: Board of Governors of the Federal Reserve System. Hendry: Nuffield College. Grayham: European University Institute. SR   Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 616; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm.   PG   40. PR   no charge. JE   C51, C52, E41. KW Causality. Equation Inversion. Impulse Response. Invariance. Money Demand.
AB   This overview examines conditions for reliable economic policy analysis based on econometric models, focusing on the econometric concepts of exogeneity, cointegration, causality, and invariance. Weak, strong, and super exogeneity are discussed in general; and these concepts are then applied to the use of econometric models in policy analysis when the variables are cointegrated. Implications follow for model constancy, the Lucas critique, equation inversion, and impulse response analysis. A small money-demand model for the United Kingdom illustrates the main analytical points. This paper then summarizes the other articles in this issue's special section on "Exogeneity, Cointegration, and Economic Policy Analysis.".

Estrin, Saul

TI   After Voucher Privatization: The Structure of Corporate Ownership in Russian Manufacturing Industry. AU   Earle,

John S.; Estrin, Saul.

Ettner, Susan L.
PD April 1997. TI The Impact of Psychiatric Disorders on Labor Market Outcomes. AU Ettner, Susan L.; Frank, Richard G.; Kessler, Ronald C. AA Ettner and Kessler: Harvard Medical School. Frank: Harvard Medical School and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5989; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 38. PR $5.00. JE I12, J24. KW Health Economics.
AB Data on 2225 men and 2401 women from the National Comorbidity Survey were used to examine the impact of psychiatric disorders on employment and conditional work hours and income. Two-stage instrumental variables methods were used to correct for the potential endogeneity of psychiatric disorders. The instruments used (the psychiatric disorder history of the respondent and respondent's parents) passed tests of the overidentifying restrictions. Psychiatric disorders significantly reduced employment among both men and women. Evidence was also found of small reductions in the conditional work hours of men and a substantial drop in the conditional earnings of men and women, although these findings were somewhat more sensitive to the estimation methods and specification of the model.

Evans, William N.
PD April 1997. TI Can Higher Cigarette Taxes Improve Birth Outcomes? AU Evans, William N.; Ringel, Jeanne S. AA Evans: University of Maryland and National Bureau of Economic Research. Ringel: Brookings Institution. SR National Bureau of Economic Research Working Paper: 5998; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 38. PR $5.00. JE H20, I12, I18. KW Health Economics. Public Economics.
AB This study uses within-state variation in taxes over the 1989-1992 time period to test whether maternal smoking and birth outcomes are responsive to higher state cigarette taxes. Data on the outcomes of interest are taken from the Natality Detail files, generating a sample of roughly 10.5 million births. The results indicate that smoking participation declines when excise taxes are increased. The elasticity of demand for cigarettes is estimated to be approximately -0.25. In addition, estimates of two-part models suggest that taxes only alter the probability a mother smokes and not average daily consumption conditional on smoking. Reduced-form models also indicate that higher excise taxes translate into higher birth weights. These two sets of results can be used to form an instrumental variables estimate of the impact of smoking on birth weight. This estimate indicates that maternal smoking reduces average birth weight by 367 grams, which is remarkably close to estimates from random assignment clinical trials. It is important to note that as a policy tool to improve birth outcomes, cigarette taxes are a blunt instrument. Taxes will be imposed on all smokers, but the benefits received and costs imposed extend beyond the targeted population.

Evenson, Robert E.
PD February 1997. TI Rice Varietal Improvement and International Exchange of Rice Germplasm. AA Yale University. SR Yale Economic Growth Center Discussion Paper: 771; Yale University, Economic Growth Center P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 42. PR $2.00 plus postage. JE O13, O20, O40, Q16, Q17. KW Rice Production. Genetic Resource. Productivity.
AB Rice is the most important food grain in developing countries. Rapid population growth in developing countries during the 1950's and 1960's presented a massive challenge to rice producers. Rice production would have to be expanded at historically unprecedented rates to maintain per capita rice consumption levels. That challenge was met. Rice production expanded more rapidly than population. The challenge was met primarily by increased yields per hectare of land. This paper documents the role of varietal improvement and of genetic resources in achieving yield improvement. It shows that varietal improvement was international in character with the International Rice Research Institute in the Philippines playing the leading role. More than 100 national rice breeding programs contributed to the pool of approximately 2,000 rice varieties constituting the "green revolution" in rice. Access to and the international exchange of genetic resources in the form of farmer selected "landraces" was vital.

PD June 1997. TI Long-Run Structural and Productivity Change in U.S. Agriculture Effects of Prices and Policies. AU Evenson, Robert E.; Huffman, Wallace B. AA Yale University and Iowa State University. SR Yale Economic Growth Center Discussion Paper: 773; Yale University, Economic Growt Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 37. PR $2.00 plus postage. JE D24, Q11, Q12, Q16. KW Farm Structure. Productivity. Research. Technical Change. Agriculture.
AB This paper presents (1) a conceptual framework for structural change when farms may be multiproduct or specialized and (2) an econometrics examination of causes of structural and total factor productivity (TFP) change for U.S. agriculture. Farm size, farm specialization, and part- time farming are the structural dimension emphasized, and they become potential channels to TFP change. Using state aggregate data starting in 1950, the authors conclude that input prices, public and private research, public extension, and government commodity programs have directly and indirectly caused change in U.S. farm structure and TFP. The results suggest that changes in farm size, however, have been dominated by input price changes rather than by technology or government programs.

PD September 1997. TI Economic Growth, International Technological Spillovers and Public Policy: Theory and Empirical Evidence from Asia. AU Evenson, Robert E.; Singh, Lakhwinder. AA Evenson: Yale University. Lakhwinder: Punjabi University. SR Yale Economic Growth Center Discussion Paper: 777; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 21. PR $2.00 plus postage. JE F43, O19, O31, O47, O53. KW Growth. Technology Spillovers. Asia. Productivity.
AB This paper examines, within the new growth theory framework, the contribution of international technological spillovers using panel data for eleven Asian countries over the period 1970-93. A country's productivity growth is shown to depend not only on its domestic R&D investment but also on the R&D investment of its trading partners. The evidence for such positive international technological spillovers is strong.

This paper also shows that the beneficial effects of international technological spillovers on productivity growth are stronger in South East Asian countries than in South Asian countries.

TI The Effects of Transaction Costs on Labor Market Participation and Earnings: Evidence From Rural Philippine Markets. AU Lanzona, Leonardo A.; Evenson, Robert E.

Faini, Riccardo
TI Globalization and Migratory Pressures from Developing Countries: A Simulation Analysis. AU de Melo, Jamie; Faini, Riccardo; Grether, Jean-Marie.

Fardmanesh, Mohsen
PD June 1996. TI External Shocks and Structural Adjustments: A Dutch Disease Dynamic Analysis. AA Temple University. SR Yale Economic Growth Center Discussion Paper: 760; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 25. PR $2.00 plus postage. JE D50, E32, F41. KW Dutch Disease. External Shocks. Structural Adjustment.
AB This paper develops a three-sector dynamic general equilibrium model of Dutch Disease for an oil-exporting small open economy. Agricultural, manufacturing and nontradable goods are distinguished. Sectoral capital stock adjusts gradually. Spiral or monotone adjustment paths occur depending on the typology of the economy. A more developed oil exporter could experience spiral adjustments; the short-run and long-run sectoral effects of an oil shock are qualitatively different. A less developed oil exporter would experience monotone adjustments; the short-run and long-run sectoral effects of an oil shock are qualitatively similar. The model developed can be applied to any 'small' open economy adjusting to external revenues and terms of trade shocks.

PD June 1996. TI Wage and Price Control Policies in Socialist Transitional Economies. AU Fardmanesh, Mohsen; Tan, Li. AA Fardmanesh: Temple University. Tan: WEFA Group. SR Yale Economic Growth Center Discussion Paper: 761; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 40. PR $2.00 plus postage. JE E24, E31, F13, P21, P22. KW Liberalization. Structural Adjustment. Price Policy. Wage Policy. Transitional Economies.
AB This paper studies the structural impact of wage and price control policies in socialist transitional economies using a two-sector three- factor small open economy model. It illustrates the results quantitatively via simulation exercises. At the earlier stage of the transition when labor is immobile, a strict control on the price of the non-tradables and the wage rate minimizes the fall in employment and output. Also, a more severe control on the price of the non-tradables than on the wage rate alleviates the fall in the real wage at negligible costs in lost employment and output. At the later stage of the transition when labor becomes mobile, the liberalization of the price of the non-tradables can proceed faster than that of the wage rate. This policy combination increases employment and output and reduces the shortage for the non-tradables, but lowers the real wage.

Faust, Jon
PD April 1998. TI The Robustness of Identified VAR

Conclusions About Money. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 610; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 48. PR no charge. JE C32, C52, E52. KW Identification. Vector Autoregressions. Monetary Policy.
AB This paper presents a new way to assess robustness of claims from identified VAR work. All possible identifications are checked for the one that is worst for the claim, subject to the restriction that the VAR produce reasonable impulse responses to shocks. The statistic on which the claim is based need not be identified; thus, one can assess claims in large models using minimal restrictions. The technique reveals only weak support for the claim that monetary policy shocks contribute a small portion of the forecast error variance of post-War U.S. output in standard 6-variable and 13-variable models.

Favero, Carlo A.
PD July 1997. TI Extracting Information from Asset Prices: The Methodology of EMU Calculators. AU Favero, Carlo A.; Giavazzi, Francesco; Tabellini, Guido; Iacone, Fabrizio. AA Favero, Giavazzi, and Iacone: IGIER, Universita Bocconi, Milano. Tabellini: Universita di Brescia and IGIER, Universita Bocconi. SR Centre for Economic Policy Research, Discussion Paper: 1676; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 28. PR 5 pounds or $10.00. JE E43, E52. KW Term Structure. Expectational Model. EMU.
AB This paper develops a particular technique for extracting market expectations from asset prices. We use the term structure of interest rates to estimate the probability the market attaches to a country, Italy, joining the European Monetary Union at a given date. The extraction of such a probability is based on the presumption that the term structure contains valuable information regarding the markets' assessment of a country's chances of joining EMU. The case of Italy is interesting because in the survey regularly conducted by Reuters the probability that Italy joins EMU in 1999 fluctuated, in the first months of 1997, between 0.07 and 0.15 while during the same period the measures computed by financial houses - which are based on the term structure of interest rates - ranged between 0.5 and 0.8. The paper proposes a new method for computing these probabilities and shows that the discrepancies between survey and market-based measures are not the result of market inefficiencies, but of incorrect use of the term structure to compute probabilities. The technique proposed in the paper can also be used to distinguish between convergence of probabilities and convergence of fundamentals.

TI Measuring Monetary Policy with VAR Models: An Evaluation. AU Bagliano, Fabio; Favero, Carlo A.

Feddersen, Timothy J.
PD October 1997. TI Abstention in Elections with Asymmetric Information and Diverse Preferences. AU Feddersen, Timothy J.; Pesendorfer, Wolfgang. AA Feddersen: Northwestern University. Pesendorfer: Princeton University. SR Northwestern University Center for Mathematical Studies in Economics and Management

Science Discussion Paper: 1195; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 43. PR $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. JE D71, D72, D82. KW Voting Behavior. Abstention. Asymmetric Information.

AB The authors analyze a model of a two-candidate election in which voters have asymmetric information and diverse preferences. Voters may costlessly choose to either vote for one of the candidates or abstain. The authors demonstrate that a strictly positive fraction of the electorate will abstain and, nevertheless, elections effectively aggregate voter's private information. The model also provides an explanation for observed patterns of participation and partisanship.

Feenstra, Robert C.

PD January 1997. TI World Trade Flows, 1970-1992, with Production and Tariff Data. AU Feenstra, Robert C.; Lipsey, Robert E.; Bowen, Harry P. AA Feenstra and Bowen: University of California and National Bureau of Economic Research. Lipsey: National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5910; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 62. PR $5.00. JE C80, F14. KW International Trade. Investment.

AB This paper describes two databases dealing with world bilateral trade flows: The World Trade Database (WTDB) assembled by Statistics Canada, which contains bilateral trade flows for all countries over 1970-1992, classified according to the Standard International Trade Classification, Revision 2 (with some modification); and the Compatible Trade and Production (COMTAP) database assembled by the Organization for Economic Cooperation and Development (OECD), which contains production of manufactured goods in OECD countries and bilateral trade flows between these countries and all their trading partners over 1970-1985, classified according to the International Standard Industrial Classification, Revision 2. These databases are available to academic users on the CD-ROM "NBER Trade Database, Disk 2: World Trade Flows, 1970-1992," which can be ordered for $50 from the Publications Department, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138. Also contained on the CD-ROM is information on country factor endowments, tariff and non-tariff barriers for selected countries, and input-output tables for the United Kingdom and the United States. The WTDB database is made available under a license with Statistics Canada, the terms of which are described herein, and the COMTAP database is made available by permission of the OECD.

PD March 1997. TI Putting Things in Order: Patterns of Trade Dynamics and Growth. AU Feenstra, Robert C.; Rose, Andrew K. AA Feenstra: University of California, Davis and National Bureau of Economic Research. Rose: University of California, Berkeley and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5975; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 46. PR $5.00. JE F10. KW International Finance. Macroeconomics. International Trade. Investment.

AB We develop a procedure to rank-order countries and commodities using dis-aggregated American imports data. We find strong evidence that both countries and commodities can be ranked, consistent with the "product cycle" hypothesis. Countries habitually begin to export goods to the United States according to an ordering; goods are also exported in order. We estimate these orderings using a semi-parametric methodology which takes account of the fact that most goods are not exported by most countries in our sample. Our orderings seem sensible, robust and intuitive. For instance, our country rankings derived from dis-aggregated trade data turn out to be highly correlated with macroeconomic phenomena such as national productivity levels and growth rates.

PD April 1997. TI U.S. Exports, 1972-1994: With State Exports and Other U.S. Data. AA University of California, Davis and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5990; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 57. PR $5.00. JE C88, F14. KW International Trade. Investment.

AB This paper describes data on U.S. exports from 1972-1994, classified according to the "Schedule B" system, Harmonized System (HS), Standard International Trade Classification (SITC, Revisions 2 and 3), and Standard Industrial Classification (SIC, 1972 basis), along with various concordances. All of these data sets are disaggregated by the destination country for exports. These data are available on the CD-ROM: "NBER Trade Database, Disk 3: U.S. Exports, 1972-1994," which can be ordered for $50 from the Publications Department, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138. A summary of the SIC data, which does not contain the source country detail and incorporates earlier years, is available via anonymous FTP from nber.org/pub/feenstra, or via the Web from www.nber.org. Disk 1 of the NBER Trade Database contained complete data on U.S. imports, and included on this CD-ROM includes state-level exports and a number of other U.S. datasets contributed by various researchers, such as tariff reductions under NAFTA, antidumping cases, domestic and imported automobile data, materials consumption by industry, foreign trade zones, foreign investment, and programs used to construct and update the data.

Feinstein, Leon

PD March 1998. TI Pre-School Education and Attainment in the NCDS and BCS. AU Feinstein, Leon; Robertson, Donald; Symons, James. AA Feinstein: London School of Economics. Robertson: Cambridge University. Symons: University College London. SR London School of Economics, Centre for Economic Performance Discussion Paper: 382; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 35. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE I21, J13. KW Pre-School. Attainment. Time Allocation. Education.

AB This paper considers the effect of how children pass time before entrance to school on attainment in primary school. The authors find in NCDS data that children perform marginally better at seven and eleven if they spent time with their mother, or at a pre-school, rather than in informal care. This holds when one controls for parental education, social class, and assessed

parental interest in the child's education, as well as the quality of the peer group. In the BCS, however, time spent in nurseries effected no improvement in math at ten as compared to time in informal care and pre-school children were performing much worse in reading. Pre-school children were more advanced in copying at five relative to children in informal care but, while copying is a good predictor of scores in both math and reading at ten, this advancement had been offset by then.

PD September 1998. TI Pre-School Educational Inequality? British Children in the 1970 Cohort. AA Centre for Economic Performance, London School of Economics and University College London. SR London School of Economics, Centre for Economic Performance Discussion Paper: 404; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 31. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE D13, H52, I21, I28, J13. KW Education. Class. Inequality. Children. Ability.
AB This paper considers mobility in and explanation of the position of children in the distribution of ability at different ages. Using the sub-samples of the BCS Cohort, it is found that 42 month ability rank provides a fairly stable guide to position in the distribution at age ten and that for girls, even the 22 month score is fairly stable. The paper then considers the question of the association of ability rank with the social background of children. It is found that children of women with degrees are substantially higher in the distribution than other children even at 22 months. By 42 months SES is also important, becoming still more important by age ten. A forecast equation for household income is developed. This is also found to be strongly associated with pre-school ability rank.

Feist, Holger

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

Feldstein, Martin

PD January 1997. TI The CEA: From Stabilization to Resource Allocation. AA National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5908; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE A11. KW Monetary Economics. Public Economics.
AB This paper traces the changing role of the Council of Economic Advisers. In the 50 years since its creation, the CEA's focus has shifted from the design of policies to achieve full employment to one of advising on the much-enlarged spending and tax activities of the federal government. The CEA's original attention to achieving cyclical stability through fiscal policy diminished as economists changed their views about the inherent stability of the economy and the usefulness of fiscal policy. With the shift of macroeconomic policy to the Federal Reserve, the CEA's macroeconomic role has diminished but not disappeared. The rapid growth of government spending during the past five decades has greatly increased the role for the CEA in seeking efficient resource allocation.

PD February 1997. TI Employment Policy of the Middle Reagan Years: What Didn't Happen and Why it Didn't Happen.

AA National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5917; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 12. PR $5.00. JE J60. KW Labor Studies. Public Economics.
AB This paper examines the record of employment and unemployment between 1982 and 1986 and discusses a variety of cyclical and structural employment policies that were considered but not implemented during the years 1982-84 when I served as chairman of the Council of Economic Advisers. Employment rose by 11 million jobs during the cyclical recovery of those four years, lowering the unemployment rate from 10.8 percent to 6.6 percent. Even before the recovery was visible, the Reagan administration supported the tight Federal Reserve policy to reverse the high inflation at the end of the 1970's. The policies to reduce structural unemployment that were considered but not enacted at the time have become law in later years: a gradual decline in the real minimum wage, the full taxation of unemployment insurance, and a work requirement for those on welfare.

Felli, Leonardo

PD July 1998. TI Technological Innovations: Slumps and Booms. AU Felli, Leonardo; Ortalo-Magne, Francois. AA Centre for Economic Performance and London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 394; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 20. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE D92, L92, O33. KW Technological Innovations. Locomotives. Railroads.
AB This paper documents the delayed adoption of a major technological innovation: the adoption of the diesel locomotive in the U.S. railway industry. Contrary to other instances of major technological innovations, the delay in the adoption of the diesel locomotive was not associated with an initial slump in output. The authors provide a theoretical model which is consistent with both an increase and a decrease in output following the invention of a new technology. Within this model they identify the key factors that make a slump in output unlikely.

Fernald, John

PD March 1998. TI Was China the First Domino? Assessing Links Between China and the Rest of Emerging Asia. AU Fernald, John; Edison, Hali J.; Loungani, Prakash. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 604; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 46. PR no charge. JE F15, F31, F36, O53. KW Asian Financial Crisis. Trade Linkages. Devaluation. Currency Crises. Contagion.
AB The authors assess links between China and the rest of emerging Asia. Some have argued that China's apparent devaluation in 1994 may have contributed to the Asian financial crisis. The authors argue that the devaluation was not economically important: The more-relevant exchange rate was

a floating rate that was not devalued, and high Chinese inflation has led to a very sharp real appreciation of the currency. Although in principle, export competition with China could nevertheless have placed pressure on other Asian exporters, the striking feature of the data is the common movement between export growth from China and from other developing Asian economies. To the extent there is evidence of export competition, it is the period from about 1989 to 1993: China's exchange rate depreciated sharply and export growth exceeded that of other Asian economies. Finally, the authors speculate on the effects of the Asian crisis on China's prospects.

PD August 1998. **TI** Puzzles in the Chinese Stock Market. **AU** Fernald, John; Rogers, John H. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 619; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve. System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 41. **PR** no charge. **JE** E44, F32, F36, G12. **KW** Emerging Markets. Stock Markets. China.
AB Any companies on China's stock markets have separate, restricted classes of shares for domestic residents and foreigners. These shares are identical other than who can own them, but foreigners pay only about one-quarter the price paid by domestic residents. The authors show that plausible differences -- about 4 percentage-points -- in expected rates of return by foreign and domestic investors can account for the generally higher level and volatility of prices for domestic shares relative to foreign shares. The authors attribute low Chinese expected returns to the limited alternative investments available in China. They then explore the extent to which various company characteristics can explain cross-company differences in the relative price paid by foreigners. For example, foreigners pay a lower relative price for companies with a higher proportion owned by the state -- reflecting, surprisingly, a higher absolute price paid by both foreigners and domestic residents. Several puzzles remain.

Fernandez, Raquel
PD February 1997. **TI** To Each According To...? Markets, Tournaments, and the Matching Problem with Borrowing Constraints. **AU** Fernandez, Raquel; Gali, Jordi. **AA** New York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5930; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 40. **PR** $5.00. **JE** D52, E44, J41. **KW** Economic Fluctuations. Growth.
AB We compare the performance of markets and tournaments as allocative mechanisms in an economy with borrowing constraints. The model consists of a continuum of individuals who differ in their initial wealth and ability level (e.g. students) and that are to be assigned to a continuum of investment opportunities or inputs of different productivity (e.g. schools of different qualities). With perfect capital markets both mechanisms achieve the efficient allocation, though markets generate higher aggregate consumption because of the waste associated with the production of signals under tournaments. When borrowing constraints are present, however, tournaments dominate markets in terms of aggregate output and, for sufficiently powerful signaling technologies, also in terms of aggregate consumption.

PD March 1997. **TI** Returns to Regionalism: An Evaluation of Non-Traditional Gains from RTAs. **AA** New York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5970; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** $5.00. **JE** F13, F15. **KW** International Trade. Investment.
AB The last decade has witnessed an explosion in the number of regional trade agreements (RTA's). There seems to be a general if ill-defined belief on the part of many policy-makers, and among a number of academics as well, that there is more to a RTA than the traditional gains from trade. This paper examines several possible benefits that RTA's may confer to their partners, including credibility, signaling, bargaining power, insurance, and coordination. It assesses the necessary conditions for each of these candidates to work; gives stylized examples of specific types of policy where it might be applicable; examines real cases where the explanation might be relevant; and discusses their overall plausibility. It concludes by examining NAFTA and the Europe Agreements viewed in this light.

PD April 1997. **TI** The Determinants of Public Education Expenditures: Evidence From the States, 1950-1990. **AU** Fernandez, Raquel; Rogerson, Richard. **AA** Fernandez: New York University and National Bureau of Economic Research. Rogerson: University of Minnesota. **SR** National Bureau of Economic Research Working Paper: 5995; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** $5.00. **JE** H52, I22. **KW** Public Economics.
AB We examine a panel data set for the U.S. states over the period 1950-1990 and use it to assess the effects of growth in personal income and number of students on expenditure on public primary and secondary education. Our analysis suggests that the share of personal income devoted to education is roughly constant, implying that per student education expenditures grow at roughly the same rate as personal income per student. We also find evidence that additional factors accounted for an increase in education expenditures over the period 1950-1970.

PD June 1997. **TI** Debt Concentration and Bargaining Power: Large Banks, Small Banks, and Secondary Prices. **AU** Fernandez, Raquel; Ozler, Sule. **AA** Fernandez: New York University. Ozler: Koc University, Turkey. **SR** Centre for Economic Policy Research, Discussion Paper: 1655; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 34. **PR** 5 pounds or $10.00. **JE** C78, F34. **KW** Sovereign Debt. Secondary Market. Discounts. Bargaining Power.
AB Commercial bank debts of developing countries are held by a heterogeneous group of banks. Here we focus on the distinction between large international money-center banks and smaller domestic banks. In particular we investigate the role of debt concentration -- the amount of a country's debt held by large banks relative to small banks -- on the secondary market price for these loans. Our empirical investigation indicates that concentration is an important determinant of secondary market discounts: higher concentration decreases the discount. An explanation for this finding is provided in the context of a bargaining model that endogenizes the level of the maximum

penalty that banks can credibly threaten to impose on a recalcitrant debtor. We show that the banks' bargaining power increases with the degree of debt concentration, which in turn increases repayment and secondary market prices (and hence lowers discounts).

Fernie, Sue

AB This paper presents very detailed case study evidence on contracts in four organizations, three of which are call centers, the fastest growing sector of employment in the U.K. This evidence is used to test predictions from the New Economics of Personnel (NEP) concerning the incidence of payment systems. The authors also contrast and test predictions from NEP with those of the earlier British Institutional School, which anticipated many of NEP's ideas on payment systems. Variations in the ratio of performance-related to basic pay among organizations can, broadly, be explained by the costs and benefits of monitoring inputs and measuring output, which comprises the core of NEP. Indeed, the monitoring of their case study employees is the theme which binds the paper together -- for call centers Jeremy Bentham's 1791 Panopticon was truly the vision of the future.

Ferrie, Joseph P.

AB Immigrants who arrived in the U.S. before the Civil War were less likely to reside in locations with high immigrant concentrations as their time in the U.S. increased. This is contrary to the experience of recent immigrants. The reduced isolation of antebellum immigrants was not due to their own movement to places with fewer immigrants but due to the movement of the native-born into places with large immigrant concentrations. The isolation of contemporary immigrants even after several years in the U.S. thus results more from the reluctance of the native-born to relocate to places with many immigrants than from immigrants' reluctance to move to places with fewer immigrants. Contemporary immigrants had greater success than antebellum immigrants avoiding unskilled jobs as they entered the U.S. job market, though they moved out of unskilled jobs less often than antebellum immigrants when comparing their occupations at two points in time after arrival.

Filer, Randall

Fishback, Price V.

AB Although workers, employers, and insurance companies by 1910 supported the adoption of workers' compensation, they fiercely debated the specific features of the legislation. This paper examines how workers' compensation benefit levels were determined in the political process of forging compromises across interest groups, and even within individual groups. A quantitative analysis of the benefit levels in each state between the time of adoption and 1930 shows several important trends. Employers in dangerous industries effectively imposed limits on accident benefits, while organized labor and the commissions that administered the laws were instrumental in achieving higher expected benefit levels. Political reformers that gained control of state legislatures in the early twentieth century aided organized labor in achieving their goal of improving workers' compensation accident benefits. The paper also presents case-studies of the political struggle over benefits that occurred in three states -- Ohio, Minnesota, and Missouri.

AB The American economy at the turn of the century offers an excellent opportunity to study relatively unregulated labor markets. The essay discusses the operation of labor markets in the early 1900's. After examining the mobility of workers, the integration of geographically dispersed labor markets, and a case study of the extent of employer monopsony, the authors examine the extent to which workers received compensating differentials for workplace disamenities and the extent to which competition among employers reduced discrimination. During this period institutions like the company town, company union, and share cropping developed. These institutions are reexamined to determine the extent to which they were exploitative or helped resolve problems with transactions costs. Finally, reformers pressed for workers' compensation and laws regulating women's hours, child labor, and workplace safety. The authors examine the impact of progressive legislation and discuss the political economy of its passage.

Fisher, Jonas D. M.

TI Algorithms for Solving Dynamic Models with Occasionally Binding Constraints. AU Christiano, Lawrence J.; Fisher, Jonas D. M.

Fitzgerald, John

PD February 1998. TI An Analysis of Sample Attrition in Panel Data: The Michigan Panel Study of Income Dynamics. AU Fitzgerald, John; Gottschalk, Peter; Moffitt, Robert. AA Fitzgerald: Bowdoin College. Gottschalk: Boston College. Moffitt: Johns Hopkins University and National Bureau of Economic Research. SR National Bureau of Economic Research Technical Paper: 220; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE C23, C33, C42, C52. KW Panel Data. Attrition. PSID.

AB By 1989 the Michigan Panel Study on Income Dynamics (PSID) had experienced approximately 50 percent sample loss from cumulative attrition from its initial 1968 membership. The authors study the effect of this attrition on the unconditional distributions of several socioeconomic variables and on the estimates of several sets of regression coefficients. They provide a statistical framework for conducting tests for attrition bias that draws a sharp distinction between selection on unobservables and on observables and that shows that weighted least squares can generate consistent parameter estimates when selection is based on observables, even when they are endogenous. The authors empirical analysis shows that attrition is highly selective. Nevertheless, the authors find that the selectivity explains very little of the attrition in the sample. Consequently, despite the large amount of attrition, they find no strong evidence that attrition has seriously distorted the representativeness of the PSID through 1989.

Fleischman, Charles A.

PD September 1997. TI The GMM Parameter Normalization Puzzle. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series: 1997/43; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 29. PR no charge. JE C13, C51, C81, E24. KW GMM. Finite Sample. Normalization. Euler Equation. Employment.

AB A feature of GMM estimation -- the use of a consistent estimate of the optimal weighting matrix rather than the joint estimation of the model parameters and the weighting matrix -- can lead to the sensitivity of GMM estimation to the choice of parameter normalization. In many applications, including Euler equation estimation, a model parameter multiplies the equation error in some normalizations. But, conventional GMM estimators that either hold the estimate of the weighting matrix fixed or allow some limited literation on the weighting matrix fail to account for the dependence of the weighting matrix on the parameter vector implied by the multiplication of the error by the parameter. In finite samples, GMM effectively minimizes the square of the parameter times the objective function that obtains from an alternative normalization where no parameter multiplies the equation error, resulting in estimates that are smaller than those from the alternative normalization.

Foley, Mark C.

PD August 1997. TI Determinants of Unemployment Duration in Russia. AA Yale University. SR Yale Economic Growth Center Discussion Paper: 779; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 39. PR $2.00 plus postage. JE J64, O10, O20. KW Unemployment Duration. Economic Transition. Russia. Gender.

AB Using information contained in a nationally representative, longitudinal survey of Russian citizens, this research analyzes the determinants of unemployment duration during the early stages of economic transition. A competing-risks, discrete-time waiting model, augmented to incorporate unobserved heterogeneity, is employed to analyze whether there is evidence of duration dependence in unemployment, and the role of demographic characteristics, alternative income support, and local demand conditions in explaining unemployment duration for working-age individuals. Married women are found to experience significantly longer unemployment spells before exiting to a job compared to married men. Older individuals are unemployed longer than comparable younger workers. Persons with higher education do not have significantly longer unemployment spells than those with secondary or even primary education. Having children has no effect on the duration of unemployment, however they do appear to motivate women to drop out of the labor force, significantly decreasing the time spent searching for work.

PD August 1997. TI Labor Market Dynamics in Russia. AA Yale University. SR Yale Economic Growth Center Discussion Paper: 780; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 54. PR $2.00 plus postage. JE J21, J22, J23, J31, J64. KW Labor Markets. Economic Transition. Russia. Employment.

AB Using information contained in a nationally representative longitudinal survey of Russian citizens, this research analyzes the labor market behavior of individuals from 1992 to 1996 during the transition to a market economy. Under Markovian assumptions, the pattern of transitions between labor market states is identified. Results indicate that the state sector has declined, but that the emerging private sector has played a limited role in alleviating growing unemployment. Multinomial logit estimates demonstrate that workers with a personal ownership stake in their firm are significantly less likely to lose their job or change to a new one. Men are more likely to make a transition to non-state employment, while women are more apt to move into the state sector. The relative instability of the private sector and self-employment is evident from higher flows into unemployment from these sectors. Education has become a factor in exiting unemployment to a job.

PD August 1997. TI Multiple Job Holding in Russia During Economic Transition. AA Yale University. SR Yale Economic Growth Center Discussion Paper: 781; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 42. PR $2.00 plus postage. JE J16, J22, J31, J33. KW Job Holding. Economic Transition. Labor Markets. Wages. Russia.

AB This article analyzes multiple job holding in the context of economic transition. Evidence from a nationally

representative longitudinal survey of Russian citizens is used to characterize secondary jobs and second job holders, with emphasis on the determinants of multiple job holding. There has been a marked increase in multiple job holding, rising from 5.6 percent overall in 1992 to 10.1 percent in 1996. Economic conditions prevalent in Russia's labor market are found to strongly affect secondary job activity. Workers who have experienced wage arrears, been placed on involuntary leave, or are working less than full-time are all significantly more likely to take on second jobs. Higher education nearly doubles this probability. Women have become not only much less likely to engage in additional work, but those that do so receive significantly lower second-job wages, with a gender wage gap of 68 percent, over 3 times that for primary jobs.

Foresi, Silverio

TI Interest Rate Targeting and the Dynamics of Short-Term Rates. AU Balduzzi, Pierluigi; Bertola, Giuseppe; Foresi, Silverio; Klapper, Leora.

TI Interest Rate Targeting and the Dynamics of Short-Term Rates. AU Balduzzi, Pierluigi; Bertola, Giuseppe; Foresi, Silverio; Klapper, Leora.

Forslid, Rikard

TI The Core-Periphery Model and Endogenous Growth. AU Baldwin, Richard E.; Forslid, Rikard.

Foster, Dean P.

PD February 1997. TI A Proof of Calibration Viz Blackwell's Approachability Theorem. AA University of Pennsylvania. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1182; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 5. PR $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. JE A23, C53, C72, D83. KW No-Regret. Worst Case. Individual Sequences. Calibration.
AB Over the past few years many proofs of calibration have been presented (Foster and Vohra (1991, 1997), Hart (1995), Fudenberg and Levine (1995), Hart and Mas-Colell (1996)). Does the literature really need one more? Probably not, but this algorithm for being calibrated is particularly simple and doesn't require a matrix inversion. Further the proof follows directly from Blackwell's approachability theorem. For these reasons it might be presentable in the classroom.

Foucault, Thierry

TI Minimum Price Variations, Time Priority and Quote Dynamics. AU Cordella, Tito; Foucault, Thierry.

Frank, Richard G.

TI The Impact of Psychiatric Disorders on Labor Market Outcomes. AU Ettner, Susan L.; Frank, Richard G.; Kessler, Ronald C.

Fraust, Jon

PD March 1998. TI Transparency and Credibility: Monetary Policy with Unobservable Goals. AU Fraust, Jon; Svensson, Lars E. O. AA Faust: Board of Governors of the

Federal Reserve System. Svensson: Stockholm University, Centre for Economic Policy Research, and National Bureau of Economic Research. SR Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 605; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 43. PR no charge. JE E52, E58, E61. KW Credibility. Transparency. Monetary Policy. Dynamic Game. Inflation.
AB The authors define and study transparency, credibility, and reputation in a model where the central bank's characteristics are unobservable to the private sector and are inferred from the policy outcome. A low-credibility bank optimally conducts a more inflationary policy than a high-credibility bank, in the sense that it induces higher inflation, but a less expansionary policy in the sense that it induces lower inflation and employment than expected. Increased transparency makes the bank's reputation and credibility more sensitive to its actions. This has a moderating influence on the bank's policy. Full transparency of the central bank's intentions is generally socially beneficial, but frequently not in the interest of the bank. Somewhat paradoxically, direct observability of idiosyncratic central bank goals removes the moderating incentive on the bank and leads to the worst equilibrium.

Freund, Caroline L.

PD January 1998. TI Regionalism and Permanent Diversion. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 602; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 43. PR no charge. JE F12, F13, F15. KW Imperfect Competition. Sunk Costs. Trade Agreements. Free Trade. Regionalism.
AB The author compares free trade reached through expanding regional trading blocks to free trade accomplished by multilateral negotiation. With sunk costs, the outcomes are different. Trade in an imperfectly competitive good flows disproportionately more between the original members of a regional agreement even after free trade is reached. They secure a higher welfare level from regionalism than from free trade achieved multilaterally; non-members, however, reach a lower welfare level. A surprising result is that world welfare during free trade is greater when it is achieved by the regional path. The author concludes with some empirical evidence from the European Union that is consistent with the model.

PD June 1998. TI Multilateralism and the Endogenous Formation of PTAs. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 614; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 22. PR no change. JE F12, F13, F15. KW Trade. Regionalism. Imperfect Competition. Tariffs.
AB This paper examines the interaction between preferential trade agreements (PTA's) and multilateral tariff reduction in a model of imperfect competition. A growing literature finds that

the formation of PTA's alters the incentives for and the sustainability of multilateral tariff reduction. The authors show that the causation is not one-sided - - multilateral tariff reduction also affects the formation of PTA's. Specifically, tariff reduction enhances the incentives to form a PTA and increases the likelihood that it is self-enforcing. Thus, each round of multilateral tariff reduction should lead to a new wave of PTA's. This may help to explain the current trend towards regionalism.

TI Disintegration. AU Djankov, Simeom; Freund, Caroline L.

Fullerton, Don

PD February 1997. TI Neglected Effects on the Uses Side: Even a Uniform Tax Would Change Relative Goods Prices. AU Fullerton, Don; Rogers, Diane Lim. AA Fullerton: University of Texas, Austin. Rogers: Congressional Budget Office. SR National Bureau of Economic Research Working Paper: 5937; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 14. PR $5.00. JE H22. KW Public Economics.
AB Fundamental tax reform may change relative prices of consumption goods and may therefore have important effects on the uses side that are ignored by most general equilibrium simulation models. For a uniform rate of tax, in our model, results on the uses side are driven by the nonuniform tax system being replaced. Similar effects occur under any uniform and comprehensive tax reform, whether the current system is replaced by a consumption tax, a wage tax, or a pure income tax. Any such reform that eliminates the current preferential treatment of housing would impose an additional one-time levy on the elderly, and any reform that eliminates the current double taxation of corporate capital would reduce the relative prices of corporate-capital-intensive goods bought by the poor.

PD April 1997. TI The Case for a Two-Part Instrument: Presumptive Tax and Environmental Subsidy. AU Fullerton, Don; Wolverton, Ann. AA Fullerton: University of Texas, Austin and National Bureau of Economic Research. Wolverton: University of Texas, Austin. SR National Bureau of Economic Research Working Paper: 5993; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 35. PR $5.00. JE H23, Q21. KW Public Economics.
AB This paper builds two simple general equilibrium models to demonstrate the equivalence between the Pigovian tax and the combination of a presumptive tax and an environmental subsidy. A presumptive tax is a tax that is imposed under the presumption that all production uses a dirty technology or all consumption goods become waste. The environmental subsidy is then provided only to the extent that production uses a cleaner technology or that consumption goods are recycled. To analyze the usefulness of the tax-subsidy combination, we review conceptual considerations regarding its implementation and practical considerations regarding its actual use throughout the world. While the tax-subsidy combination is increasingly being used, in the form of a deposit-refund system, we argue that more flexible interpretations are important to explore. The two parts of such a policy do not have to apply to the same side of the market. The tax and subsidy do not have to equal one another, and they can apply to different goods altogether. Compared to the Pigovian tax, a two-part instrument may be

easier to enforce, may be easier to enact, and can still force the market to recognize the social cost of disposal.

Furfine, Craig

PD August 1997. TI Analyzing Alternative Intraday Credit Policies in Real-Time Gross Settlement Systems. AU Furfine, Craig; Stehm, Jeff. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series: 1997/40; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 24. PR no charge. JE E58, G21. KW Daylight Credit. Payment Systems. Intraday Credit. Central Banks.
AB This paper examines a central bank's choice of intraday credit policy for Real-Time Gross Settlement (RTGS) systems. Formal analysis of central bank objectives and commercial bank payment activity provides insight into both the choice and effects of several possible intraday credit policies. Observed intraday credit policies are interpreted within the context of the model. Among G-10 central banks, different combinations of prices, collateral, and quantity limits have been chosen to manage the supply of intraday credit. Conditions that rationalize these choices are shown to rely on a) central bank preferences regarding credit risk and systemic risk, b) liquidity management technologies, and c) the cost of collateral.

Galeotti, Marzio

TI Inventories, Production Smoothing and the Shape of the Cost Function. AU Guiso, Luigi; Galeotti, Marzio; Sack, Brian; Schiantarelli, Fabio.

Gali, Jordi

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

TI Monetary Policy Rules in Practice: Some International Evidence. AU Clarida, Richard; Gali, Jordi; Gertler, Mark.

Gaury, E. G. A.

PD March 1998. TI New Species of Hybrid Pull Systems. AU Gaury, E. G. A.; Pierreval, H.; Kleijnen, Jack P. C. AA Gaury and Kleijnen: CentER and Tilburg University. Pierreval: IFMA. SR Tilburg CentER for Economic Research Discussion Paper: 9831; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 25. PR no charge. JE C10, C15, C63, D24. KW Pull Production Control. Simulation. Production. Computational Techniques.
AB Recent types of pull production control systems are Conwip and hybrid Kanban/Conwip. In this article the authors see these types of systems as species that have evolved from Kanban. The authors generalize this evolutionary approach, in order to generate new hybrid species. To find the best species, they use evolutionary computation and simulation. This novel approach is illustrated through the example of a production line with four stages. For this example, the simulated evolution process converges to a new species of pull system that cannot be classified as Kanban, Conwip, or Hybrid. This species not only performs at least as well as Hybrid Kanban/Conwip, but also has a simpler implementation.

Gaynor, Martin

TI The Sociology of Groups and the Economics of Incentives: Theory and Evidence on Compensation Systems. AU Encinosa III, William E.; Gaynor, Martin; Rebitzer, James B.

Genesove, David

PD March 1997. TI The Sugar Institute Learns to Organize Information Exchange. AU Genesove, David; Mullin, Wallace P. AA Genesove: Massachusetts Institute of Technology and National Bureau of Economic Research. Mullin: University of Chicago and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5981; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 36. PR $5.00. JE L13. KW Industrial Organization.

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 rights to the larger firms.

Gerlach, Stefan

TI Consumption and Credit Constraints: International Evidence. AU Bacchetta, Philippe; Gerlach, Stefan.

PD November 1997. TI Exchange Rate Regimes and the Expectations Hypothesis of the Term Structure. AU Gerlach, Stefan; Smets, Frank. AA Bank for International Settlements. SR Centre for Economic Policy Research, Discussion Paper: 1752; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 20. PR 5 pounds or $10.00. JE E40. KW Term Structure of Interest Rates. Expectations Hypothesis. Speculative Attacks.

AB This paper uses weekly data on short-term eurorates for ten countries for the period 1979-96 to document that the ability of the expectations hypothesis (EH) to account for movements in the term structure is greater, and that short-term interest rates are more predictable, under fixed than under floating exchange rates. The paper also shows that the higher predictability does not arise solely because of monetary policy responses to speculative pressures in the foreign exchange markets: while it is more difficult to reject the EH in periods of exchange market turmoil, the EH is not rejected in tranquil periods.

Geroski, Paul A.

PD October 1997. TI Are Differences in Firm Size Transitory or Permanent? AU Geroski, Paul A.; Walters, Chris F.; Urga, Giovanni. AA Geroski and Walters: London Business School. Urga: Centre for Economic Forecasting. SR Centre for Economic Policy Research, Discussion Paper: 1691; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 36. PR 5 pounds or $10.00. JE C22, C23, L11. KW Gibrat's Law. Panel Data. Cointegration. Convergence.

AB Cross-section or short-panel econometric techniques typically used to examine Gibrat's Law of Proportionate Effect suggest that some degree of mean reversion exists, but may exaggerate the apparent randomness of corporate growth. We argue that a more natural way to explore the long- run distribution of firm sizes is to examine data on the growth of particular firms over long periods of time. Using a sample of 77 UK firms' real total net assets data observed continually for more than 30 years, our conclusions are that growth rates are highly variable over time, but differences in growth rates between firms do not persist for very long. Further, firms show no tendency to converge to either a common size or to a pattern of stable size differences over time. These results are compared and contrasted with standard approaches using the same data, which suggest firms reach and maintain stable positions in a skewed size distribution.

PD October 1997. TI Thinking Creatively About Markets. AA London Business School. SR Centre for Economic Policy Research, Discussion Paper: 1694; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 36. PR 5 pounds or $10.00. JE L10, M21. KW Markets. Corporate Strategy. Anti-Trust.

AB Market definitions are an abstraction: they are useful only to the extent that they help us to organize the way we think about certain types of economic activity. This paper critically examines three different methods of identifying market boundaries, stressing the link between substantive content and the needs of the user of the definition. Most traditional definitions have focused on identifying trading markets (defined by the 'law of one price') or anti-trust markets (identified by reference to the ability of a group of firms to artificially elevate prices). A third market concept - that of the strategic market - focuses more directly on the needs of corporate users.

Gersbach, Hans

PD November 1997. TI Debt Contracts, Collapse and Regulation as Competition Phenomena. AU Gersbach, Hans; Uhlig, Harald. AA Gersbach: Universitat Heidelberg. Uhlig: Tilburg University. SR Centre for Economic Policy Research, Discussion Paper: 1742; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 30. PR 5 pounds or $10.00. JE D43, D80, D92, G24, G28, G30. KW Contract. Debt Contract. Adverse Selection. Moral Hazard. Competition. Financial Collapse. Regulation.

AB This paper studies a credit market with adverse selection and moral hazard where sufficient sorting is impossible. The crucial novel feature is the competition between lenders in their choice of contracts offered. The quality of investment projects is unobservable by banks and entrepreneurs' investment decisions are not contractible, but output conditional on investment is. The paper explains the empirically observed prevalence of debt contracts as an equilibrium phenomenon with competing lenders. Equilibrium contracts must be immune against raisin- picking by competitors. Non-debt contracts allow competitors to offer sweet deals to particularly good debtors, who will self-select to choose such a deal, while bad

debtors distribute themselves across all offered contracts. Competition between banks introduces three possibilities for a breakdown of credit markets which do not occur when a bank has a monopoly. First, average returns decrease since banks compete for good lenders, which may make lending altogether unprofitable. Second, banks can intermediate debtors, which is in turn dominated by a simple debt contract, only attractive for very good entrepreneurs. As a result, no equilibrium in pure strategies exists.

PD January 1998. TI Debt Contracts, Collapse and Regulation as Competition Phenomena. AU Gersbach, Hans; Uhlig, Harald. AA Gersbach: University of Heidelberg. Uhlig: CentER, Tilburg University and Centre for Economic Policy Research. SR Tilburg CentER for Economic Research Discussion Paper: 9801; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 32. PR no charge. JE D82, D92, G24, G28, G32. KW Financial Intermediation. Regulation. Corporate Finance.
AB See the abstract for Gersbach, Hans and Harald Uhlig. November 1997, "Debt Contracts, Collapse and Regulation as Competition Phenomena". Centre for Economic Policy Research, Discussion Paper: 1742; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.cepr.demon.co.uk.

Gertler, Mark

PD April 1997. TI Government Debt and Social Security in a Life-Cycle Economy. AA New York University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6000; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 40. PR $5.00. JE E13, E60. KW Monetary Economics. Public Economics.
AB This paper develops a tractable overlapping generations model that is useful for analyzing both the short and long run impact of fiscal policy and social security. It modifies the Blanchard (1985)/Weil (1987) framework to allow for life/cycle behavior. This is accomplished by introducing random transition from work to retirement, and then from retirement to death. The transition probabilities may be picked to allow for realistic average lengths of life, work and retirement. The resulting framework is not appreciably more difficult to analyze than the standard Cass/Koopmans one sector growth model: Besides the capital stock, there is only one additional state variable: the distribution of wealth between workers and retirees. Under reasonable parameter values, government debt and social security have significant effects on capital intensity.

TI Monetary Policy Rules in Practice: Some International Evidence. AU Clarida, Richard; Gali, Jordi; Gertler, Mark.

Giavazzi, Francesco

TI Extracting Information from Asset Prices: The Methodology of EMU Calculators. AU Favero, Carlo A.; Giavazzi, Francesco; Tabellini, Guido; Iacone, Fabrizio.

Gibson, Michael S.

TI Pitfalls in Tests for Changes in Correlations. AU Boyer, Brian H.; Gibson, Michael S.; Loretan, Mico.

PD December 1997. TI Evaluating Forecasts of Correlation Using Option Pricing. AU Gibson, Michael S.; Boyer, Brian H. AA Board of Governors of the Federal Reserve Systems. SR Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 600; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 47. PR no charge. JE C53, G11, G13. KW Forecast Evaluation. Garch. Markov Switching. Weekend Effect. Option Pricing.
AB A forecast of the correlation between two asset prices is required to price or hedge an option whose payoff depends on both asset prices or to measure the risk of a portfolio whose return depends on both asset prices. The authors develop a forecast evaluation methodology based on option pricing, extending a technique that Engle et al (1993) introduced to evaluate volatility forecasts. A forecast of the variance-covariance matrix of joint asset returns is used to generate a trading strategy for a package of simulated options. The most accurate forecast will produce the most profitable trading strategy. The package of simulated options can be chosen to be sensitive to correlation, to volatility, or to any arbitrary combination of the two. In an empirical application, the authors focus on the ability to forecast the correlation between two stock market indices. They compare the correlation forecasting ability of several models.

Gilleskie, Donna B.

TI Retiree Health Insurance and the Labor Force Behavior of Older Men in the 1990's. AU Blau, David M.; Gilleskie, Donna B.

Giorgianni, Lorenzo

TI Determinants of Korean Trade Flows and their Geographical Destination. AU Milesi-Ferretti, Gian Maria; Giorgianni, Lorenzo.

Gneezy, Uri

PD March 1998. TI On Competing Rewards Standards-An Experimental Study of Ultimatum Bargaining. AU Gneezy, Uri; Guth, Werner. AA Gneezy: University of Haifa. Gueth: Humboldt University of Berlin. SR Tilburg CentER for Economic Research Discussion Paper: 9826; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 18. PR no charge. JE C78, C90. KW Bargaining. Rewards Standards. Experiments.
AB In the tradition of earlier experimental studies, this paper introduces competing reward standards by letting parties bargain over the distribution of chips. The monetary equivalents of a chip for the bargaining parties can be equal (no competing rewards) or different (competing rewards). The ultimatum game is used as a tool to learn about reward standards in an asymmetric procedure. A major effect of different monetary chip equivalents is observed only when the proposer has a higher chip value. Results are compared to those reported in Kagel et al. (1996), who used a different experimental design.

TI Price Competition and Market Concentration: An Experimental Study. AU Dufwenberg, Martin; Gneezy, Uri.

Goetzmann, William N.

TI Offshore Hedge Funds: Survival and Performance 1989-1995. AU Brown, Stephen J.; Goetzmann, William N.; Ibbotson, Roger G.

Goldberg, Linda S.

TI The Evolving External Orientation of Manufacturing Industries: Evidence from Four Countries. AU Campa, Jose M.; Goldberg, Linda S.

Goldberg, Pinelopi Koujianou

PD February 1997. TI Protection for Sale: An Empirical Investigation. AU Goldberg, Pinelopi Koujianou; Maggi, Giovanni. AA Goldberg: Princeton University and National Bureau of Economic Research. Maggi: Princeton University. SR National Bureau of Economic Research Working Paper: 5942; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org.   PG 29.   PR $5.00.   JE F10. KW International Trade. Investment.
AB A prominent model in the recent political-economy literature on trade policy is Grossman and Helpman's (1994) "Protection for Sale" model. This model yields clear predictions for the cross-sectional structure of trade protection. The objective of our paper is to check whether the predictions of the Grossman-Helpman model are consistent with the data and, if the model finds support, to estimate its two key structural parameters: the government's valuation of welfare relative to contributions, and the fraction of the voting population represented by a lobby. We find that the pattern of protection in the U.S. in 1983 is consistent with the basic predictions of the model. Our estimate of the government's valuation of welfare relative to contributions is surprisingly high; the weight of welfare in the government's objective function is estimated to be between 50 and 88 times the weight of contributions.

Gollier, Christian

PD October 1997. TI Horizon Length and Portfolio Risk. AU Gollier, Christian; Zeckhauser, Richard J. AA Gollier: University of Toulouse. Zeckhauser: Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Technical Paper: 216; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE D81, G11. KW Asset Pricing. Risk. Arrow-Pratt Index. Horizon Length.
AB This paper compares the attitude towards current risk of two expected-utility-maximizing investors that are identical except that the first investor will live longer than the second one. In one of the models under consideration, there are two assets at every period. The first asset has a zero sure return, whereas the second asset is risky without serial correlation of yields. It is often suggested that the young investor should purchase more of the risky asset than the old investor in such circumstances. The authors show that a necessary and sufficient condition to get this property is that the Arrow-Pratt index of absolute tolerance (T sub u) be convex. If a positive risk-free rate is allowed for, the necessary and sufficient condition is T sub u convex, plus T sub u(0) = 0. It extends the well-known result that investors are myopic in this model if and only if the utility function exhibits constant relative risk aversion.

Gomes, Joao

PD February 1997. TI Equilibrium Unemployment. AU Gomes, Joao; Greenwood, Jeremy; Rebelo, Sergio. AA Gomes and Greenwood: University of Rochester. Rebelo: University of Rochester and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5922; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 31. PR $5.00. JE E24, E32. KW Economic Fluctuations. Growth.
AB A search-theoretic general equilibrium model of frictional unemployment is shown to be consistent with some of the key regularities of unemployment over the business cycle. In the model the return to a job moves stochastically. Agents can choose either to quit and search for a better job, or continue working. Search generates job offers that agents can accept or reject. Two distinguishing features of current work relative to the existing business cycle literature on labor market fluctuations are :(i) the decision to accept or reject jobs is modeled explicitly, and (ii) there is imperfect insurance against unemployment.

Gong, Xiaodong

PD December 1997. TI Family Structure and Female Labour Supply in Mexico City. AU Gong, Xiaodong; van Soest, Arthur. AA CentER and Tilburg University. SR Tilburg CentER for Economic Research Discussion Paper: 97114; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 32. PR no charge. JE C31, C35, J16, J22, O54. KW Female Labor. Labor Supply. Family Structure. Discrete Regression.
AB This paper investigates labor supply of the wives of the heads of households in Mexico City, with a focus on the impact of family structure. A static neoclassical structural model is used. The authors assume that each woman chooses her labor supply and corresponding income so that her utility is maximized, conditional upon her husband's labor supply and earnings. The authors use a direct translog specification, and include family composition variables as taste shifters. Also taken into account are fixed costs of working, nonlinear taxes, unobserved preference variation, prediction errors in wages of nonworkers, and potential endogeneity of wages. The models are estimated by smooth simulated maximum likelihood using data from Mexico's Urban Employment Survey drawn in 1992. The authors find income elasticities of labor supply of about -0.35, and wage elasticities of about 0.5. The latter is substantially overestimated if wage rate endogeneity is not taken into account.

Gordon, Roger H.

TI Taxes and Government Incentives: Eastern Europe Versus China. AU Li, David D.; Gordon, Roger H.

TI Government Distributional Concerns and Economic Policy During the Transition from Socialism. AU Li, David D.; Gordon, Roger H.

Gottschalk, Peter

TI An Analysis of Sample Attrition in Panel Data: The Michigan Panel Study of Income Dynamics. AU Fitzgerald, John; Gottschalk, Peter; Moffitt, Robert.

Goulder, Lawrence H.
TI When Can Carbon Abatement Policies Increase Welfare? The Fundamental Role of Distorted Factor Markets. AU Parry, Ian W. H.; Williams III, Roberton C.; Goulder, Lawrence H.

Grafe, Clemens
PD July 1998. TI The Real Exchange Rate in Transition Economies. AU Grafe, Clemens; Wyplosz, Charles. AA Grafe: Centre for Economic Performance and London School of Economics. Wyplosz: Graduate Institute of International Studies, Geneva and Centre for Economic Policy Research. SR London School of Economics, Centre for Economic Performance Discussion Paper: 395; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 24. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE F31, F35, F41, O16, O33. KW Transition Economies. Exchange Rates. Foreign Financing. Wage Gap.

AB Real exchange rates appear to present a specific behavior in the early phase of transition: they are largely unaffected by nominal exchange rate movements and exhibit trend appreciation. The model presented here describes the transition process as the emergence of two new (traded and non-traded good) sectors and the decline of an inefficient and subsidized state sector. The absence of financial markets means that firms accumulate capital through retained earnings. Labor markets are imperfect giving rise to a wage gap. The model shows that the real exchange rate plays the crucial role of determining real wages. Through real wages it sets the pace for the development of the new sectors as workers are attracted out of the state sector. The link between growth and real appreciation differs from the usual Balassa Samuelson effect. The paper also explores the role of labor market distortions and foreign financing.

Gray, Wayne
TI The NBER Manufacturing Productivity Database. AU Bartelsman, Eric J.; Gray, Wayne.

Greenstein, Shane M.
PD February 1997. TI The Evolution of Advanced Large Scale Information Infrastructure in the United States. AU Greenstein, Shane M.; Lizardo, Mercedes M.; Spiller, Pablo T. AA Greenstein: University of Illinois, Urbana/Champaign and National Bureau of Economic Research. Lizardo: University of Illinois, Urbana/Champaign. Spiller: University of California, Berkeley. SR National Bureau of Economic Research Working Paper: 5929; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 29. PR $5.00. JE L86, L96. KW Productivity.

AB Is private industry investing in backbone digital technology in a manner consistent with social policy? To address this question we assemble highly disaggregate data and compute indices for the geographic distribution of advanced backbone information technology in computing and telecommunications, focusing on recent changes in the indices. Our evidence suggests that the stock of advanced information technology capital, and access to it, became more equally distributed across the U.S. between the mid 1980's and early 1990's. In light of these findings there needs to be careful rethinking of the current policy concerns about the distribution of backbone technologies.

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

Gregg, Paul
PD July 1998. TI Child Development and Success or Failure in the Youth Labour Market. AU Gregg, Paul; Machin, Stephen. AA Gregg: London School of Economics. Machin: University College London and London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 397; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 36. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE J13, J31. KW Child Development. Delinquency. Disadvantage. Economic Outcomes. Labor Markets.

AB This paper examines the relationship between childhood factors and subsequent economic and social success or failure as an adult. Unlike many studies which typically have little data on pre-labor market factors the authors are able to draw upon a host of childhood variables from the National Child Development Study, a survey of all people born in a week of March 1958. The results show a strong negative relationship between measures of childhood disadvantage (child-specific and family-based) and economic and social success at ages 16, 23, and 33. An important part (but not all) of this is accounted for by the massively worse educational attainment of those the authors characterize as experiencing childhood disadvantage. Finally, they uncover an important cross-generational effect as the indicators of childhood disadvantage considered are negatively and significantly correlated with the cognitive achievement (as measured by test scores) of the children of NCDS cohort members in 1991.

Grether, Jean-Marie
TI Globalization and Migratory Pressures from Developing Countries: A Simulation Analysis. AU de Melo, Jamie; Faini, Riccardo; Grether, Jean-Marie.

Griliches, Zvi
TI Empirical Patterns of Firm Growth and R&D Investment: A Quality Ladder Model Interpretation. AU Klette, Tor Jakob; Griliches, Zvi.

Grinath III, Arthur
PD March 1997. TI Debt, Default, and Revenue Structure: The American State Debt Crisis in the Early 1840's. AU Grinath III, Arthur; Sylla, Richard; Wallis, John Joseph. AA Grinath III: MICRA. Sylla: New York University and National Bureau of Economic Research. Wallis: University of Maryland. SR National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 97; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE H63, H71, N21, N41, N71. KW Development. Economic History. Debt. Property Taxes.

AB During the 1820's and 1830's, American state governments made large investments in canals, banks, and

railroads. In the early 1840's, nine states defaulted on their debts, four ultimately repudiated all or part of their debts, and three went through substantial renegotiations. This paper examines how the states got into the debt crisis and, as a result of their earlier history, how they responded to fiscal pressure in the debt crisis. The explanation is built around revenue structures. States along the developed eastern seaboard were able to avoid politically costly property taxes, while states along the frontier were forced to rely heavily on property taxes. When faced with fiscal pressures, two of the defaulting states -- Maryland and Pennsylvania -- were able to resume debt payments, with back interest, as soon as a property tax was enacted. The other defaulting states, however, already had high property taxes.

Grogger, Jeff
PD March 1997. TI Market Wages and Youth Crime. AA University of California, Santa Barbara and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5983; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 40. PR $5.00. JE J20, K14. KW Labor Studies.
AB Youth crime is widespread. To study the effect of market wages on youth crime, I analyze a time-allocation model in which consumers face parametric wages and diminishing marginal returns to crime. Under these assumptions, an individual who works will commit crime if the returns to the first hour of crime exceed his market wage. This decision rule imposes considerable structure on the econometric model, which I estimate using data from the National Longitudinal Survey Youth Cohort. The empirical model provides estimates of the determinants of criminal returns and of the wage responsiveness of criminal participation. Young men's behavior appears to be very responsive to price incentives. My estimates suggest that falling real wages may have been an important determinant of rising youth crime over the past two decades. Moreover, wages explain an important component of the racial differential in criminal participation, and they largely explain the age distribution of crime.

PD April 1997. TI Local Violence, Educational Attainment, and Teacher Pay. AA University of California, Santa Barbara and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6003; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 34. PR $5.00. JE I20, J10. KW Labor Studies.
AB Violence in and around schools has drawn increasing attention lately from both the public and policy makers. Despite the importance of the problem, however, research on this topic has been limited. In this paper I analyze how local violence affects high school graduation, college attendance, and teacher pay. Using data from the High School and Beyond survey, I find that local violence has important effects. Moderate levels of violence reduce the likelihood of high school graduation by 5.1 percentage points on average, and lower the likelihood that a student will attend college by 6.9 percentage points. They also raise teacher salaries by 2.4 percent.

Gros, Daniel
TI Evidence on the Costs of Intra-European Exchange Rate Variability. AU Belke, Ansgar; Gros, Daniel.

Grosfeld, Irena
PD October 1997. TI Wage and Investment Behaviour in Transition: Evidence from a Polish Panel Data Set. AU Grosfeld, Irena; Nivet, Jean-Francois. AA Grosfeld: DELTA. Nivet: Creppa Universite d'amiens. SR Centre for Economic Policy Research, Discussion Paper: 1726; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 40. PR 5 pounds or $10.00. JE C23, D21, P21. KW Transition. Enterprise Behavior. Insider Effects. Privatization. Panel Data.
AB This paper looks at the behavior of large industrial firms in Poland in 1988-94. Using a longitudinal enterprise-level data set, we are able to test systematically various hypotheses concerning firms' reactions to the change in their environment. The results confirm a structural break after the introduction of the package of reforms in 1990. Labor market conditions and product market competition exert important downward pressure on wages. After 1993, however, this initially strong response is weakened. Comparison of wage-setting behavior across different types of firms confirms important differences in wage negotiation. In state- owned enterprises (SOE's) insiders capture an important part of productivity increases, while in privatized firms there is no positive relationship between firms' ability to pay and wage increases. Privatization appears important for the strategic dimension of enterprise restructuring. Privatized firms invest more and have greater capacity to ensure higher output growth.

Grossman, Herschel I.
PD April 1997. TI Sovereign Debt and Consumption Smoothing. AU Grossman, Herschel I.; Han, Taejoon. AA Grossman: Brown University and National Bureau of Economic Research. Han: Sejong Institute, Korea. SR National Bureau of Economic Research Working Paper: 5997; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 10. PR $5.00. JE F34, H63. KW Economic Fluctuations. Growth. Monetary Economics.
AB This paper shows that whether or not a sovereign can borrow to smooth consumption depends both on how consumption smoothing is achieved, whether by contingent debt issuance or by contingent debt servicing, and on the exact nature of the penalty for debt repudiation. If a sovereign that repudiated its debt could not borrow again, but could continue to save and to dissave, then contingent debt issuance, without contingent debt servicing, cannot support a positive amount of uncollateralized sovereign debt. But, under this same specification of the penalty for repudiation, contingent debt servicing supports a positive amount of uncollateralized sovereign debt.

Gruber, Jonathan
TI The Technology of Birth: Health Insurance, Medical Interventions, and Infant Health. AU Currie, Janet; Gruber, Jonathan.

Guiso, Luigi
PD October 1997. TI High-Tech Firms and Credit Rationing. AA Banca d'Italia. SR Centre for Economic Policy Research, Discussion Paper: 1696; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 36.

PR 5 pounds or $10.00. JE E51, G21. KW Credit Rationing. Innovation. Information.

AB Informational frictions between borrowers and lenders differ across classes of borrowers. Innovative firms undertake high-risk-high-return projects which are likely to be little understood by financial intermediaries. As a consequence, they may end up allocating too large a share of funds to traditional, low-risk-low-return projects. This proposition finds some support in a cross-section of Italian manufacturing firms. Using several proxies to classify firms into high- tech and low-tech groups and direct information on each firm's access to bank credit, high-tech firms are found to be more likely to be credit-constrained than low-tech firms. The results suggest that the responsiveness of R&D expenditure to cash flow found in the literature is likely to be due to pervasive credit constraints on innovative firms rather than to cash flow proxying for future expectations. The paper also sheds light on the main factors affecting the probability of a firm being rationed in the credit market.

PD October 1997. TI Inventories, Production Smoothing and the Shape of the Cost Function. AU Guiso, Luigi; Galeotti, Marzio; Sack, Brian; Schiantarelli, Fabio. AA Guiso: Banca d'Italia. Galeotti: University of Bergamo. Sack: MIT. Schiantarelli: Boston College. SR Centre for Economic Policy Research, Discussion Paper: 1697; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 44. PR 5 pounds or $10.00. JE D21, D92, E22. KW Inventories. Production Smoothing. Cost Function.

AB In this paper we present estimates of inventory models based on firm level panel data and investigate whether an over-simplified specification of the production technology may account for the failure to find technological incentives to smooth production in the context of the standard linear-quadratic model of inventory behavior. In particular, we argue that if the role of quasi-fixed factors is not modeled properly, this may lead to inconsistent estimates of marginal costs and, therefore, to erroneous conclusions about the convexity/concavity of the cost function. The model is accordingly extended to allow for a general restricted quadratic cost function, on the assumption that capital is costly to adjust. The evidence obtained by estimating the standard inventory model on a panel of Italian manufacturing firms suggests that marginal costs are decreasing. This result is overturned when one allows for the general quadratic cost function with capital as a quasi-fixed input, however, implying that the firm's technology provides incentives to smooth production. The conclusion that the cost function is convex in output is robust to allowing for adjustment costs for both capital and labor.

Gunther, Todd A.

TI Evaluating Density Forecasts. AU Diebold, Francis X.; Gunther, Todd A.; Tay, Anthony S.

Gustman, Alan L.

PD February 1997. TI Pension and Social Security Wealth in the Health and Retirement Study. AU Gustman, Alan L.; Mitchell, Olivia S.; Samwick, Andrew A.; Steinmeier, Thomas L. AA Gustman and Samwick: Dartmouth College and National Bureau of Economic Research. Mitchell: University of Pennsylvania and National Bureau of Economic Research. Steinmeier: Texas Tech University. SR National

Bureau of Economic Research Working Paper: 5912; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE D31, E21, H55, J14, J26, J32. KW Aging. Labor Studies.

AB Together, pensions, social security and health insurance account for half of the wealth held by all households in the Health and Retirement Study (HRS), for 60 percent of total wealth of HRS households who are in the 45th to 55th wealth percentiles, and even for 48 percent of wealth for those in the 90th to 95th wealth percentiles. The HRS surveys households aged 51 to 61 in 1992, and obtains pension plan descriptions from respondents' employers. Pension accrual profiles, income and wealth distributions by type, wealth-income ratios and accrued wealth by pension status are also explored.

Guth, Werner

TI On Competing Rewards Standards-An Experimental Study of Ultimatum Bargaining. AU Gneezy, Uri; Guth, Werner.

Gylfason, Thorvaldur

PD July 1997. TI A Mixed Blessing: Natural Resources and Economic Growth. AU Gylfason, Thorvaldur; Zoega, Gylfi; Herbertsson, Tryggvi Thor. AA Gylfason and Herbertsson: University of Iceland. Zoega: Birkbeck College. SR Centre for Economic Policy Research, Discussion Paper: 1668; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 40. PR 5 pounds or $10.00. JE O41, Q32. KW Endogenous Growth. Natural Resources. Dutch Disease. Learning-By- Doing.

AB This paper diagnoses the symptoms of the Dutch disease in a two- sector stochastic endogenous growth model. A productive, low skill- intensive primary sector causes the currency to appreciate in real terms, thus hampering the development of a high skill-intensive secondary sector and thereby reducing growth. Moreover, the volatility of the primary sector generates real exchange rate uncertainty, and may thus reduce investment and learning in the secondary sector and hence also growth. Cross-section and panel regressions based on data for 125 countries in the period 1960-92 confirm a statistically significant inverse relationship between the size of the primary sector and economic growth, but not between the volatility of the real exchange rate and growth.

Haber, Stephen

PD November 1996. TI The Efficiency Consequences of Institutional Change: Financial Market Regulation and Industrial Productivity Growth in Brazil, 1866-1934. AA Stanford University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 94; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE L51, N16, N26, N46, O47. KW Development. Institutional Reform. Brazil. Economic History.

AB This paper examines one of the central hypotheses of the New Institutional Economics: that the reform of institutions -- the rules and regulations enforced by the State that both permit and bound the operation of markets -- is crucial for the process

of economic growth. It examines this hypothesis by estimating the productivity gain afforded to Brazilian textile firms by the reform of the regulations governing Brazil's securities markets in 1890. The author also analyzes corporate financial statements and stock market data for publicly held firms covering the period 1895-1940. The paper argues that the reform of the regulations pertaining to limited liability and mandatory disclosure permitted the widespread use of Brazil's debt and equity markets to mobilize capital for industry. This meant that the capital constraints faced by firms prior to the 1890's were relaxed. The result was an increased rate of investment and accelerated rates of productivity growth.

Haines, Michael R.

PD August 1998. TI Health, Height, Nutrition, and Mortality: Evidence on the Antebellum Puzzle from Union Army Recruits in the Middle of the Nineteenth Century. AA Colgate University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 107; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE I12, N11, N31. KW Economic History. Mortality. Height. Antebellum. Health.
AB The "Antebellum Puzzle" describes the situation of declining stature and possibly rising mortality in the three decades prior to the American Civil War. It is a puzzle since this period was one of rapid economic growth and development in the United States. Much of the debate has centered on whether the American diet deteriorated in the middle of the 19th century. But the mortality environment also appears to have worsened. This paper uses data on the heights of Union Army recruits as an indicator of the standard of living of Americans during this period. For the United States and for New York State, urbanization was negatively related to heights, as was the census death rate in 1850 and a measure of mobility. Although New York State's agriculture was rapidly commercializing in this era and specializing in dairy products, its nutrition may have been deteriorating overall, with substantial local variation.

Hall, Brian J.

TI The Moral Hazard of Insuring the Insurers. AU Bohn, James G.; Hall, Brian J.

Hall, Robert E.

PD February 1997. TI Macroeconomic Fluctuations and the Allocation of Time. AA Stanford University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5933; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 32. PR $5.00. JE E32. KW Economic Fluctuations. Growth.
AB What are the fundamental driving forces of macroeconomic fluctuations? In particular, why do people spend more time working in booms and less in recessions? These are basic questions of macroeconomics. Recent thinking has emphasized technology shifts, preference shifts, and changes in government purchases as likely driving forces. It is useful to distinguish atemporal and intertemporal effects of the driving forces. Under standard assumptions, the technology

shift has no effect through atemporal channels because income and substitution effects exactly offset. A straightforward decomposition of movements of employment attributes most of them to the atemporal effects of preference shifts.

Hamada, Koichi

PD March 1996. TI Consumers, the Legal System and Product Liability Reform: A Comparative Perspective Between Japan and the United States. AA Yale University. SR Yale Economic Growth Center Discussion Paper: 759; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 46. PR $2.00 plus postage. JE D18, K13. KW Product Liability. Legal Comparison. Japan. Law.
AB A new Product Liability (PL) Act in Japan became effective in July, 1995. In the United States, congress passed, subject to the endorsement of the president, the legislation that limits the ceiling of compensations and punitive damages in PL cases. Thus, there seems to be a converging tendency between the Japanese system and the U.S. system. A large difference exists between the United States and Japan, particularly in the number of suits about product liability. For example, within a half year after the enforcement of the new PL Act, only a single case was brought to court in Japan. This paper explains the legal content, the social background and the legislation process of the new PL Act in Japan. Using economic analysis, it clarifies the question of what the consequences are with the difference in legal systems on resource allocation in the two countries.

PD August 1996. TI Japan 1968: A Reflection Point During the Era of the Economic Miracle. AA Yale University. SR Yale Economic Growth Center Discussion Paper: 764; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 42. PR $2.00 plus postage. JE F32, O40, O53. KW Japan. High Growth Period. Student Movements. Bretton Woods. Pollution.
AB 1968 was an epoch-making year in Japanese economic history, or in Japanese history in general. In this centennial year after the Meiji restoration, Japan's GNP became the second largest in the world surpassing West Germany. Japan was cruising on one of the most rapid growth trajectories, but it was anticipating the shade of future changes. Student movements flourished, being synchronized the world over, pollution in urban areas erupted and inflationary pressure began to surface. Japan's balance of current account turned into a pattern of chronic surplus, the pattern that led to the collapse of the Bretton Woods regime. In the socio-economic sense, 1968 was a reflection point of Japan's high growth period. This paper describes the economic forces that drove Japan in this pivotal year as well as its social and political background.

Hamermesh, Daniel S.

PD March 1997. TI The Demand for Hours of Labor: Direct Evidence from California. AU Hamermesh, Daniel S.; Trejo, Stephen J. AA Hamermesh: University of Texas and National Bureau of Economic Research. Trejo: University of California, Santa Barbara. SR National Bureau of Economic Research Working Paper: 5973; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 15. PR $5.00. JE J23. KW Labor Studies.

ABSTRACTS 199

AB For many years California has required that most women receive time- and-a-half for hours of work beyond 8 in a given day. In 1980 this daily overtime penalty was extended to men. This change provides a unique opportunity to estimate the impact of an exogenous increase in the relative price of a marginal hour of labor on the demand for hours of work. Analyzing Current Population Survey data from 1973 and 1985, we find that the overtime penalty substantially reduced the amount of daily overtime worked by California men compared to men in other states and to women in California. Our estimates imply that the price elasticity of demand for overtime hours is at least -0.70.

Hamers, Herbert
PD March 1998. TI On the Balancedness of M-Sequencing Games. AU Hamers, Herbert; Klijn, Flip; Suijs, Jeroen. AA CentER and Tilburg University. SR Tilburg CentER for Economic Research Discussion Paper: 9817; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 15. PR no charge. JE C71. KW Cooperative Games. Sequencing Situations.
AB This paper studies m-sequencing games that arise from sequencing situations with m parallel and identical machines. These m-sequencing games, which involve n players, give rise to m-machine games, which involve m players. Here, n corresponds to the number of jobs in an m-sequencing situation, and m corresponds to the number of machines in the same m-sequencing situation. The authors prove that an m-sequencing game is balanced if and only if the corresponding m-machine game is balanced. Furthermore, it is shown that m-sequencing games are balanced if m is a member of the set {1,2}. Finally, if m is greater than or equal to 3, balancedness is established for two special classes of m-sequencing games.

Han, Taejoon
TI Sovereign Debt and Consumption Smoothing. AU Grossman, Herschel I.; Han, Taejoon.

Hardouvelis, Gikas
PD November 1997. TI The Asymmetric Relation Between Margin Requirements and Stock Market Volatility Across Bull and Bear Markets. AU Hardouvelis, Gikas; Pericli, Andreas; Theodossiou, Panayiotis. AA Hardouvelis: National Bank of Greece. Pericli: Asset and Liability Management, FHLMC. SR Centre for Economic Policy Research, Discussion Paper: 1746; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 50. PR 5 pounds or $10.00. JE G18. KW Margin Requirements. Stock Prices. Volatility. EGARCH Model. Federal Reserve. Credit. Asymmetry.
AB EGARCH-M models based on a daily, weekly, and monthly S&P-500 returns over the period October 1934-September 1994 reveal that higher margins have a much stronger negative relation to subsequent volatility in bull markets than in bear markets. Higher margins are also negatively related to subsequent conditional stock returns, apparently because they reduce systemic risk. These empirical regularities are consistent with the pyramiding-depyramiding framework of stock prices that U.S. Congress had in mind when it instituted margin regulation in 1934, and suggest that a prudential rule for setting margins over time would be to raise them during periods of unwarranted price increases and to lower them immediately after large declines in stock prices.

Hart, Oliver
PD January 1997. TI Default and Renegotiation: A Dynamic Model of Debt. AU Hart, Oliver; Moore, John. AA Hart: Harvard University and National Bureau of Economic Research. Moore: London School of Economics. SR National Bureau of Economic Research Working Paper: 5907; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 41. PR $5.00. JE D21, G32, G33. KW Corporate Finance.
AB We analyze the role of debt in persuading an entrepreneur to pay out cash flows, rather than to divert them. In the first part of the paper we study the optimal debt contract -- specifically, the trade-off between the size of the loan and the repayment -- under the assumption that some debt contract is optimal. In the second part we consider a more general class of (non-debt) contracts, and derive sufficient conditions for debt to be optimal among these.

Hartog, Joop
PD October 1997. TI Wages and the Bargaining Regime in a Corporatist Setting: The Netherlands. AU Hartog, Joop; Leuven, Edwin; Teulings, Coen. AA University of Amsterdam. SR Centre for Economic Policy Research, Discussion Paper: 1706; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 44. PR 5 pounds or $10.00. JE J30, J31. KW Wages. Bargaining Regime.
AB In a corporatist country like the Netherlands, wages should not be distinguished by union membership status, but by bargaining regime. Acknowledging only the firms' bargaining regime, we find small differences between four regimes and certainly no distinction between "covered" and 'uncovered' firms. Distinguishing -- within covered firms -- between workers covered and uncovered by collective bargaining, including a model with partially unobserved sector selection, we find somewhat larger bargaining regime effects, and sometimes substantial coverage effects. Estimation of the latter, is seriously troubled by unobserved heterogeneity, however.

Hatton, Timothy J.
TI Poverty and the Welfare State in Inter-war London. AU Bailey, Roy E.; Hatton, Timothy J.

Hausman, Jerry
PD March 1997. TI Cellular Telephone, New Products and the CPI. AA Massachusetts Institute of Technology and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5982; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 15. PR $5.00. JE L96. KW Productivity.
AB The cellular telephone is an example of a new product that has significantly affected how Americans live. Since their introduction in 1983, cellular telephone adoption has grown at 25-35% per year such that at year end 1996 about 42 million cellular telephones are in use in the U.S. However, the cellular telephone has not been included in the construction of the CPI, and the CPI will not include cellular telephones until 1998 or

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1999. This neglect of new goods leads to an upward bias in the CPI. The analysis of the paper demonstrates that the gains in consumer welfare from a new product such as cellular telephone can be substantial. The paper also gives an approximation result which the BLS could use to calculate gains in consumer welfare from new products for use in the CPI. The BLS telecommunications CPI estimates that since 1988, telecommunications prices have increased by 8.5% or an increase of 1.02% per year. This estimate ignores cellular service. A corrected telecommunication services COLI that includes cellular service decreased from 1.0 in 1988 to 0.903 in 1996 for a decrease of 1.28% per year. Thus, the bias in the BLS telecommunications services CPI equals approximately 2.3 percentage points per year.

Hayri, Aydin
PD   October 1997. TI   Debt Relief. AA   University of Warwick. SR   Centre for Economic Policy Research, Discussion Paper: 1701; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG   44. PR   5 pounds or $10.00. JE   F34. KW   Debt Relief. Debt Reduction. Brady Deals.
AB   This paper develops a model for pricing sovereign debt under continuous time uncertainty, allowing creditors to carry out debt reductions. Focusing on the sovereign's willingness to pay rather than on their ability to pay, it models debt reductions as a non-cooperative game. The formulae derived from the model successfully predict the outcomes of the Brady debt relief deals. The model also predicts that the sovereign will get a positive share of the surplus generated by the debt reductions and that the country will be on the 'wrong' side of its Debt Laffer curve well before the debt reduction.

Hege, Ulrich
TI   Venture Capital Financing, Moral Hazard and Learning. AU   Bergemann, Dirk; Hege, Ulrich.

Hellerstein, Judith K.
TI   Imposing Moment Restrictions from Auxiliary Data by Weighting. AU   Imbens, Guido W.; Hellerstein, Judith K.

Henderson, Dale W.
PD   January 1998. TI   The Choice of a Monetary Policy Reaction Function in a Simple Optimizing Model. AU   Henderson, Dale W.; Kim, Jinill. AA   Board of Governors of the Federal Reserve System. SR   Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 601; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm.   PG   45. PR   no charge. JE   E31, E43, E52. KW   Monetary Policy. Reaction Functions. Inflation Targeting. Price Level. Interest Rates.
AB   Monetary policy reaction functions are compared in a simple optimizing model with one-period nominal stickiness, i.i.d. shocks, and no capital accumulation. The interest rate is the instrument and is either kept constant, "interest rate targeting" for short, or used in targeting one of the following: money, the price level, output, nominal income, money growth, inflation, and the sum of inflation and output. There are three varieties of one-period nominal stickiness and three kinds of

shocks. A given type of targeting is "better" than another for a given variable and kind of shock if it results in smaller deviations of the variable from its target value. It is not surprising that rankings may depend both on the type of shock and on which variable is the target variable. However, it may be somewhat surprising that, given that wages are sticky, rankings depend on whether prices are sticky, but not vice versa.

Hendry, David F.
TI   The Demand for Broad Money in the United Kingdom, 1878-1993. AU   Ericsson, Neil R.; Hendry, David F.; Prestwich, Kevin M.

TI   Exogeneity, Cointegration, and Economic Policy Analysis. AU   Ericsson, Neil R.; Hendry, David F.; Mizon Grayham E.

Herbertsson, Tryggvi Thor
TI   A Mixed Blessing: Natural Resources and Economic Growth. AU   Gylfason, Thorvaldur; Zoega, Gylfi; Herbertsson, Tryggvi Thor.

Herings, P. Jean-Jacques
PD   January 1998. TI   Computation of the Nash Equilibrium Selected by the Tracing Procedure in N-Person Games. AU   Herings, P. Jean-Jacques; van den Elzen, Antoon. AA   CentER and Tilburg University. SR   Tilburg CentER for Economic Research Discussion Paper: 9804; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG   30. PR   no charge. JE   C63, C72. KW   Equilibria Computation. Noncooperative Games. Tracing Procedure.
AB   Harsanyi and Selten (1988) have proposed a theory of equilibrium selection that selects a unique Nash equilibrium for any non-cooperative N-person game. The heart of their theory is given by the tracing procedure, a mathematical construction that adjusts arbitrary prior beliefs into equilibrium beliefs. The tracing procedure plays an important role in the definition of risk-dominance for Nash equilibria. Although the term "procedure" suggests a numerical approach, the tracing procedure itself is a non-constructive method. In this paper the authors propose a homotopy algorithm that generates a path of strategies. By employing lexicographic pivoting techniques it can be shown that for the entire class of non-cooperative N-person games the path converges to an approximate Nash equilibrium, even when the starting point or the game is degenerate. The outcome of the algorithm is shown to be arbitrarily close to the beliefs proposed by the tracing procedure.

PD   January 1998. TI   Continua of Underemployment Equilibria. AU   Herings, P. Jean-Jacques; Dreze, Jacques H. AA   Herings: CentER and Tilburg University. Dreze: Universite de Louvain. SR   Tilburg CentER for Economic Research Discussion Paper: 9805; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm.   PG   33.   PR   no charge. JE   C62, D51, E24. KW   General Equilibrium. Underemployment. Coordination Failures. Indeterminacy.
AB   In this paper the existence of unemployment is partly explained as being the result of coordination failures. This is

achieved by considering a standard general equilibrium model and splitting the set of commodities in two groups. The first group contains commodities like gold. The prices of these commodities are fully flexible, even in the short run, and their markets always clear. The prices of the commodities in the second group are rigid in the short run (for instance labor or some consumer goods) and households and firms may expect restricted supply possibilities. The authors show that such expectations are self-enforcing, even if all prices of commodities in the second group are competitive. In that case it is shown that as a result of coordination failures a continuum of equilibria results, among which is an equilibrium with approximately no trade in the commodities of the second group, and a Walrasian equilibrium.

Herk, Leonard F.
PD September 1997. TI Optimal Regulatory Transparency. AA Columbia University and Institute on East Central Europe. SR Columbia University, Department of Economics Discussion Paper Series: 9798/01; Department of Economics, Columbia University, 420 West 118 Street, Room 1022 IAB, New York, NY 10027. Website: www.columbia.edu/cu/economics. PG 30. PR $4.00 U.S.; $5.00 Canada; $7.00 All other countries. JE D73, K42. KW Regulatory Transparency. Regulatory Efficiency. Corruption. Private Investment.
AB Private investment activity is regulated by two semi-independent agencies: an enforcement authority. Once undertaken, an investment project may be interdicted by the enforcement authority before its final payoff is realized. The investor may refer an interdiction to the appeals authority, who upholds or voids the interdiction according to a privately known rule of law. The appeals authority determines the degree of regulatory transparency by issuing more or less revealing guidelines describing the operation of the rule of law in various circumstances. In this setting, the appeals authority maximizes its ability to extract rents from investors by issuing weakly differentiated guidelines which yield the highest possible rate of interdiction by the enforcement authority, together with the highest possible likelihood that interdiction will be overturned on appeal.

Hirano, Keisuke
PD April 1998. TI Combining Panel Data Sets with Attrition and Refreshment Samples. AU Hirano, Keisuke; Imbens, Guido W.; Ridder, Geert; Rubin, Donald B. AA Hirano and Rubin: Harvard University. Imbens: University of California, Los Angeles and National Bureau of Economic Research. Ridder: Free University Amsterdam, Netherlands. SR National Bureau of Economic Research Technical Paper: 230; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE C23, C33, C51, C80. KW Panel Data. Missing Data. Refreshment Samples. Attrition. Travel.
AB Although panel data allows researchers to identify more complex models than cross-sectional data, missing data problems can be more severe in panels. Sometimes, in the hope of mitigating the effects of attrition without losing the fundamental advantages of panel data over cross-sections, panel data sets are augmented by replacing units who have dropped out with new units randomly sampled from the original population. In this paper the authors explore the benefits of such samples, called refreshment samples, for estimating models of attrition. They describe the manner in which the presence of refreshment samples allows the researcher to test various models for attrition in panel data. The main result in the paper makes precise the extent to which refreshment samples are informative about the attrition process; a class of non-ignorable missing data models can be identified without making strong distributional or functional form assumptions if refreshment samples are available.

Hoeberichts, Marco
TI Incentive Contracts for Central Bankers Under Certainty: Walsh-Svensson Non-Equivalence Revisited. AU Schaling, Eric; Hoeberichts, Marco; Eijffinger, Sylvester.

Hoekman, Bernard
PD October 1997. TI Protection and Trade in Services: A Survey. AU Hoekman, Bernard; Primo Braga, Carlos A. AA World Bank. SR Centre for Economic Policy Research, Discussion Paper: 1705; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 44. PR 5 pounds or $10.00. JE F13, F23. KW Services Trade. Protectionism. World Trade Organization. Trade Negotiations.
AB This paper surveys the literature on trade in services, focusing on the policies that are used to restrict such trade, the gains from liberalization, and the institutional mechanisms that have been adopted in the pursuit of liberalization. It argues that technological progress and international trade negotiations are likely to keep liberalization of trade in services a high profile policy issue. It also suggests that the research agenda should focus on developing better estimates of the welfare costs of protectionism in the service sector. This will require the quantification of barriers to the international exchange of services.

TI Determinants of Intra-Industry Trade Between East and West Europe. AU Djankov, Simeon; Hoekman, Bernard; Aturupane, Chonira.

TI Competition Law in Post-Central Planning Bulgaria. AU Djankov, Simeon; Hoekman, Bernard.

Holtz-Eakin, Douglas
TI Labor Earnings Mobility and Inequality in the United States and Germany During the Growth Years of the 1980's. AU Burkhauser, Richard V.; Holtz-Eakin, Douglas; Rhody, Stephen E.

Honohan, Patrick
PD October 1997. TI Miniblocs and Fringe Currencies of the EMU. AA Honohan: Economic and Social Research Institute. SR Centre for Economic Policy Research, Discussion Paper: 1704; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 60. PR 5 pounds or $10.00. JE F33, F36, F42. KW Monetary Integration. Exchange Rates.
AB Like all major currencies, the euro will attract a fringe of hangers-on. Though this need not influence overall policy with regard to the value of the euro, important policy questions arise. Can EMU members gain from cooperative arrangements for influencing or supporting fringe currencies? If so, what kinds of arrangement can be envisaged? This paper offers a preliminary

examination of these issues. It identifies potential scope for mutual gains from cooperative arrangements and discusses particular countries which might be candidates. The design of such arrangements is also considered, especially including alternatives to the ERM-type of arrangement.

Hooper, Peter
PD April 1998. TI Trade Elasticities for G-7 Countries. AU Hooper, Peter; Johnson, Karen; Marquez, Jaime. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 609; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 108. PR no charge. JE C51, C52, F17, F32, F41. KW Exports. Imports. Cointegration. Error Correction. Trade.
AB This paper reports the results of a project to estimate and test the stability properties of conventional equations relating real imports and exports of goods and services for the G-7 countries to their incomes and relative prices. The authors begin by estimating cointegration vectors and the error-correction formulations. They then test the stability of these equations using Chow and Kalman-Filter tests. The evidence suggests three findings. First, conventional trade equations and elasticities are stable enough, in most cases, to perform adequately in forecasting and policy simulations. Second, income elasticities of U.S. trade have not been shifting in a direction that will tend to ease the trend toward deterioration in the U.S. trade position. The income- elasticity gap for Japan found in earlier studies was not confirmed in this analysis. Finally, the price channel is weak, if not wholly ineffective, in the case of continental European countries.

Hoxby, Caroline
PD February 1998. TI Overidentification Tests with Grouped Data. AU Hoxby, Caroline; Paserman, M. Daniele. AA Hoxby: Harvard University and National Bureau of Economic Research. Paserman: Harvard University. SR National Bureau of Economic Research Technical Paper: 223; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE C52, C80. KW Overidentification Tests. Exogeneity. Grouped Data.
AB This paper examines the validity of overidentification tests and exogeneity tests in the presence of grouped data. The authors find that even a small intra-group correlation, when instruments do not vary within groups, may generate a substantial bias in the standard overidentification tests described in textbooks.

Hubbard, R. Glenn
PD April 1997. TI Capital-Market Imperfections and Investment. AA Columbia University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5996; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 62. PR $5.00. JE E20, E50, G30, H30. KW Corporate Finance. Economic Fluctuations. Growth. Monetary Economics. Public Economics.
AB Over the past decade, a number of researchers have extended conventional models of business fixed investment to incorporate a role for "financial constraints" in determining investment. This paper reviews developments and challenges in this empirical research, and uses advances in models of information and incentive problems to motivate those developments and challenges. First, I describe analytical underpinnings of models of capital-market imperfections in the investment process, and illustrate the principal testable implications of those models. Second, I motivate tests and describe and critique existing empirical studies. Third, the review considers applications of the underlying models to a range of investment activities, including inventory investment, R&D, employment demand, pricing by imperfectly competitive firms, business formation and survival, and risk management. Fourth, I discuss implications of this research program for analysis of effects of investment on monetary policy and tax policy. Finally, I examine some potentially fruitful avenues for future research.

Huffman, Wallace B.
TI Long-Run Structural and Productivity Change in U.S. Agriculture Effects of Prices and Policies. AU Evenson, Robert E.; Huffman, Wallace B.

Huisman, Kuno J. M.
PD January 1998. TI A Further Analysis on Strategic Timing of Adoption of New Technologies Under Uncertainty. AU Huisman, Kuno J. M.; Kort, Peter M. AA CentER and Tilburg University. SR Tilburg CentER for Economic Research Discussion Paper: 9803; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 13. PR no charge. JE O31, O32. KW Strategic Timing. Technology Adoption. New Technology. Duopoly.
AB This paper analyzes technology adoption in the context of a duopoly, where the time between adoption and successful implementation is uncertain. This framework is taken from Stenbacka and Tombak, and it adds uncertainty to the much cited work of Fudenberg and Tirole. The analysis is mainly focussed on the case where the firm roles are endogenous. The authors find that under a certain scenario dispersed adoption timings turn into joint-adoption when firm roles become endogenous. Further, it is shown that for reasonable parameter values it can happen that the profit stream belonging to the preemption equilibrium is so low both firms are better off if they both decide to stick to producing with their old technology forever. Another interesting result is that with joint adoption in the feedback case with exogenous firm roles, the most reasonable outcome results in delayment of joint-adoption in the case that firm roles become endogenous.

Hurd, Michael D.
PD February 1998. TI Anchoring Effects in the HRS: Experimental and Nonexperimental Evidence. AA RAND Corporation and National Bureau of Economic Research. SR National Bureau of Economic Research Technical Paper: 219; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE C42, C80, I10, J26. KW Panel Data. Anchoring. Unfolding Brackets. Health. Retirement.
AB The Health and Retirement Study (HRS) and a number of

other major household surveys use unfolding brackets to reduce item nonresponse. However, the initial entry point into a bracketing sequence is likely to act as an anchor or point of reference to the respondent. For example, when the initial entry point is high the distribution will be shifted to the right, leading one to believe that holdings of the particular asset are greater than they truly are. This paper analyzes some experimental data on housing value from HRS wave 3 for anchoring effects. The paper also compares the distributions of assets in HRS waves 1 and 2 for evidence about any anchoring effects that may have been caused by changes in the entry points between the waves. Both the experimental data on housing values and the nonexperimental data from HRS waves 1 and 2 on assets show anchoring effects.

Ibbotson, Roger G.
TI Offshore Hedge Funds: Survival and Performance 1989-1995. AU Brown, Stephen J.; Goetzmann, William N.; Ibbotson, Roger G.

Ichino, Andrea
PD October 1997. TI Culture, Discrimination and Individual Productivity: Regional Evidence From Personnel Data in a Large Italian Firm. AU Ichino, Andrea; Ichino, Pietro. AA Ichino: IGIER, Universita Bocconi. Ichino: Universita Bocconni, IGIER. SR Centre for Economic Policy Research, Discussion Paper: 1709; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 44. PR 5 pounds or $10.00. JE J24, J70, K04. KW Individual Productivity. Discrimination. Illegal Behavior. AB This paper documents the existence of striking regional differences in the reported behavior of employees working within the same firm, but in different Italian regions. In particular, the frequency of recorded and punished misconduct episodes is significantly higher among employees working in the south; migrants moving from the north to the south assimilate completely to the higher rate of misconduct in the receiving region, while migrants moving from the south to the north assimilate only partially to the lower misconduct rate in the receiving region. These differences can, in principle, be attributed to discrimination or to individual effort. The absence of any evidence of regional discrimination in the process by which misconduct episodes are signaled and brought to the attention of the personnel office, and in terms of careers and earnings, suggests that the second explanation is more likely to be true. This conclusion is also supported by the evidence on absenteeism that replicates the findings on misconduct. While the main contribution of this paper is to measure, in a novel way, regional productivity differentials due to individual effort, it does not explore the ultimate causes of these differentials (e.g. individual characteristics or multiple equilibria), a crucial issue that will be addressed in a forthcoming companion paper.

Ichino, Pietro
TI Culture, Discrimination and Individual Productivity: Regional Evidence From Personnel Data in a Large Italian Firm. AU Ichino, Andrea; Ichino, Pietro.

Idson, Todd
TI Russia's Market Transition: Who Has Lost and How? AU Desai, Padma; Idson, Todd.

TI The Wage Arrears Crisis in Russia. AU Desai, Padma; Idson, Todd.

TI To Pay or Not to Pay: Managerial Decision Making and Wage Withholding in Russia. AU Desai, Padma; Idson, Todd.

TI Wage Arrears, Poverty, and Family Survival Strategies in Russia. AU Desai, Padma; Idson, Todd.

Imbens, Guido W.
TI Nonparametric Applications of Bayesian Inference. AU Chamberlain, Gary; Imbens, Guido W.

PD August 1996. TI Imposing Moment Restrictions from Auxiliary Data by Weighting. AU Imbens, Guido W.; Hellerstein, Judith K. AA Imbens: Harvard University and National Bureau of Economic Research. Hellerstein: University of Maryland and National Bureau of Economic Research. SR National Bureau of Economic Research Technical Paper: 202; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE C13, C51. KW Moment Restrictions. Auxiliary Data. Regression Models. Wages. AB This paper analyzes estimation of coefficients in regression models under moment restrictions where the moment restrictions are derived from auxiliary data. The authors approach is similar to those that have been used in statistics for analyzing contingency tables with known marginals. These techniques are useful in cases where data from a small, potentially non-representative data set can be supplemented with auxiliary information from another data set which may be much larger and/or more representative of the target population of interest. The moment restrictions yield weights for each observation that can subsequently be used in weighted regression analysis. The authors discuss the interpretation of these weights both under the assumption that the target population (from which the moments are constructed) and the sampled population are the same, as well as under the assumption that these populations differ. They present an application based on omitted ability bias in estimation of wage regressions.

TI Hierarchical Bayes Models With Many Instrumental Variables. AU Chamberlain, Gary; Imbens, Guido W.

TI Instrumental Variables Estimation of Quantile Treatment Effects. AU Abadie, Alberto; Angrist, Joshua D.; Imbens, Guido W.

TI Combining Panel Data Sets with Attrition and Refreshment Samples. AU Hirano, Keisuke; Imbens, Guido W.; Ridder, Geert; Rubin, Donald B.

Ippolito, Roberto
TI Shareholders and Stakeholders: Human Capital and Industry Equilibrium. AU Miller, Marcus; Zhang, Lei; Ippolito, Roberto.

Isard, Peter
TI Economic Growth and Real Exchange Rate: An Overview of the Balassa-Samuelson Hypothesis in Asia. AU Ito, Takatoshi; Isard, Peter; Symansky, Steven.

Ito, Takatoshi

PD February 1997. TI Is There Private Information in the FX Market? The Tokyo Experiment. AU Ito, Takatoshi; Lyons, Richard K.; Melvin, Michael T. AA Ito: International Monetary Fund and National Bureau of Economic Research. Lyons: University of California, Berkeley and National Bureau of Economic Research. Melvin: Arizona State University. SR National Bureau of Economic Research Working Paper: 5936; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 27. PR $5.00. JE F31, G15. KW Asset Pricing. International Finance. Macroeconomics.

AB It is common view that private information in the foreign exchange market does not exist. We provide evidence against this view. The evidence comes from the introduction of trading in Tokyo over the lunch- hour. Lunch return variance doubles with the introduction of trading, which cannot be due to public information since the flow of public information did not change with the trading rules. Having eliminated public information as the cause, we exploit the volatility pattern over the whole day to discriminate between the two alternatives: private information and pricing errors. Three key results support the predictions of private-information models. First, the volatility U-shape flattens: greater revelation over lunch leaves a smaller share for the morning and afternoon. Second, the U-shape tilts upward, an implication of information whose private value is transitory. Finally, the morning exhibits a clear U-shape when Tokyo closes over lunch, and it disappears when trading is introduced.

PD March 1997. TI Economic Growth and Real Exchange Rate: An Overview of the Balassa- Samuelson Hypothesis in Asia. AU Ito, Takatoshi; Isard, Peter; Symansky, Steven. AA Ito: Hitotsubashi University and National Bureau of Economic Research. Isard and Symansky: International Monetary Fund. SR National Bureau of Economic Research Working Paper: 5979; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 28. PR $5.00. JE E31, F31. KW International Finance. Macroeconomics.

AB The paper tests the Balassa-Samuelson hypothesis (rapid economic growth is accompanied by real exchange rate appreciation because of differential productivity growth between tradable and nontradable sectors) using data of the APEC economies. Japan, Korea, Taiwan and, to a lesser extent, Hong Kong and Singapore, were proved to follow the Balassa-Samuelson path. These countries follow a similar industrialization pattern, increasing the weight of high value-added exports. Although Hong Kong and Singapore grew fast, their real exchange rates appreciated only moderately. High productivity growth in service sectors might have been the reason for this. Other fast-growing ASEAN countries, such as Thailand, Indonesia and Malaysia did not experience real appreciation. Closer examinations of various components of the Balassa-Samuelson hypothesis movement of nontradable prices relative to tradable prices; and tradable prices (measured by common currency) do not show the international arbitrage.

Iyigun, Murat F.

PD July 1997. TI Risk, Entrepreneurship and Human Capital Accumulation. AU Iyigun, Murat F.; Owen, Ann L. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series: 1997/37; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 24. PR no charge. JE J24, O11, O40. KW Human Capital. Occupational Choice. Education. Entrepreneurship. Growth.

AB Entrepreneurial human capital plays a relatively more important role in intermediate income countries, but professional human capital is relatively more abundant in richer economies. Because the return to entrepreneurship is risky, individuals devote less time to the accumulation of entrepreneurial skills and more to the accumulation of professional skills as per capita income grows. Countries that initially have too little of either entrepreneurial or professional skills may end up in a development trap. The steady state may be characterized by either too much or too little education.

PD June 1998. TI Macroeconomic Implications of Competitive College Admissions. AU Iyigun, Murat F.; Levin, Andrew T. AA Board of Governors of the Federal Reserve. SR Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 613; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 31. PR no charge. JE D31, D82, H23, H52, I22. KW Public Education. Income Distribution. Screening.

AB The authors present a public higher education model in which there exist indivisibilities in educational investment. Consequently, when demand for educational services exceeds supply, a screening mechanism, which may potentially be imperfect, is required to choose the student body. The authors demonstrate how distortions or biases in screening -- caused by parental factors -- interact with the distribution of income to help explain the considerable differences across countries in the share of resources devoted to public higher education. Moderate degrees of admission bias lower the share of resources devoted to public education whereas higher levels of bias may have positive effects on public education supply. Thus, while lower screening biases lead to a better allocation of a given amount of spending on education, they do not necessarily lead to more political support for public education, and thereby to higher aggregate human capital and output.

Jackson, Matthew O.

PD March 1997. TI False Reputation in a Society of Players. AU Jackson, Matthew O.; Kalai, Ehud. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1184; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 21. PR $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. JE C72, D82, D83. KW Reputations. Repeated Games. Purification. Learning.

AB Exploiting small uncertainties on the part of opponents, players in long, finitely repeated games can maintain false reputations that lead to a large variety of equilibrium outcomes. Even cooperation in a finitely repeated prisoners' dilemma is obtainable. Can such false reputations be maintained in a society if the same repeated game is played recurrently by

PG 11. PR $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. JE C72, D80. KW Higher Order Beliefs. Payoff Continuity. Game Theory. Incomplete Information.

AB An incomplete information game is defined by a probability distribution w over a type space and payoff functions u. Probability distribution w* is strategically close to w if, for any bounded payoff functions u and any equilibrium of the game (w, u), there exists an approximate equilibrium of the game (w*, u) under which all players get approximately the same payoffs. This note shows that two probability distributions are strategically close if and only if (1) they assign similar ex ante probability to all events; and (2) with high ex ante probability, it is approximate common knowledge that they assign similar conditional probabilities to all events.

PD October 1997. TI Refinements and Higher Order Beliefs: A Unified Survey. AU Kajii, Atsushi; Morris, Stephen. AA Kajii: University of Tsusuba. Morris: Northwestern University and University of Pennsylvania. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1197; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 23. PR $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. JE C72, D80. KW Refinements. Higher Order Beliefs. Game Theory.

AB This paper presents a simple framework that allows us to survey and relate some different strands of the game theory literature. The authors describe a "canonical" way of adding incomplete information to a complete information game. This framework allows them to give a simple "complete theory" interpretation (Kreps 1990) of standard normal form refinements such as perfection, and to relate refinements both to the "higher order beliefs literature" (Rubinstein 1989; Monderer and Samet 1989; Morris, Rob and Shin 1995; Kajii and Morris 1995) and the "payoff uncertainty approach" (Fudenberg, Kreps and Levine 1988; Dekel and Fudenberg 1990).

Kalai, Ehud
TI False Reputation in a Society of Players. AU Jackson, Matthew O.; Kalai, Ehud.

Kalyvitis, Sarantis C.
TI Heterogeneous Traders and the Unbiasedness Hypothesis: Explaining the Mark/Dollar Bias. AU Christodoulakis, Nicos M.; Kalyvitis, Sarantis C.

Kamin, Steven B.
PD February 1998. TI A Multi-Country Comparison of the Linkages Between Inflation and Exchange Rate Competitiveness. AA Federal Reserve Board. SR Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 603; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 25. PR no charge. JE E31, F31, F41. KW Inflation. Exchange Rates. Competitiveness. Open Economy.

AB This paper describes research comparing the response of inflation to changes in exchange rate competitiveness in various regions of the world. The paper first presents evidence that an empirical relationship between the rate of inflation and the level of the real exchange rate, which was documented for Mexico in previous research by the author, holds for a large set of other countries as well. This result may pose a dilemma for policy-makers, since it implies that it may not be possible to achieve low inflation and high export competitiveness simultaneously. The paper then demonstrates that the responsiveness of inflation to the real exchange rate has been much higher in Latin America than in Asian or industrialized countries. This difference in inflationary responsiveness is not fully explained either by the prior history of inflation or by the extent of openness to foreign trade.

PD May 1998. TI Some Multi-Country Evidence on the Effects of Real Exchange Rates on Output. AU Kamin, Steven B.; Klau, Marc. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 611; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 18. PR no charge. JE E32, F31, F41. KW Contractionary Devaluation. Exchange Rates. Business Cycles.

AB The recent simultaneous occurrence of devaluation and recession in Mexico and East Asia appears to contradict the conventional view that devaluations are expansionary. Moreover, a sizeable theoretical and empirical literature also argues that exchange rate devaluations may be contractionary. However, prior statistical analyses of the impact of devaluation on output have been subject to several limitations: (i) failing to distinguish adequately between short and long-run effects; (ii) not controlling for the full range of external shocks; and (iii) not considering whether the effects of devaluation might differ between different regions of the world. The purpose of this paper is to estimate the impact of devaluation on output while attempting to address these limitations. The authors find no evidence that devaluations are contractionary in the long run. Additionally, controlling for sources of spurious correlation and reverse causality appears to mute the measured contractionary effect of devaluation in the short run.

Kaneko, Fumihiro
PD May 1997. TI An Outcome-Oriented Theory of Choice and Empirical Paradoxes in Expected Utility Theory. AA Yale University. SR Yale Economic Growth Center Discussion Paper: 774; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 66. PR $2.00 plus postage. JE D11, D81, D82. KW Expected Utility. Prospect Theory. Uncertainty. Choice.

AB The author analyzes observed choice between lotteries from an outcome-oriented point of view in the framework of choice between random variables. The author characterizes a choice maker, who faces a choice situation between lotteries, by (1) a surmising process that associates, with a pair of lotteries, a set of well-defined choice situations between random variables, and (2) a choice set that is a collection of well-defined choice situations. The author gives a partial axiomatic foundation of the theory. The theory is applied to explain the well-known paradoxes in expected utility theory.

Kantor, Shawn Everett
TI The Political Economy of Workers' Compensation Benefit Levels, 1910- 1930. AU Fishback, Price V.; Kantor, Shawn Everett.

Kaplan, Steven N.
PD April 1997. TI A Clinical Exploration of Value Creation and Destruction in Acquisitions: Organizational Design, Incentives, and Internal Capital Markets. AU Kaplan, Steven N.; Mitchell, Mark L.; Wruck, Karen H. AA Kaplan: University of Chicago and National Bureau of Economic Research. Mitchell: University of Chicago. Wruck: Harvard Business School. SR National Bureau of Economic Research Working Paper: 5999; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 50. PR $5.00. JE G30. KW Corporate Finance.
AB This paper presents clinically-based studies of two acquisitions that received very different stock market reactions at announcement -- one positive and one negative. Despite the differing market reactions, we find that ultimately neither acquisition created value overall. In exploring the reasons for the acquisition outcomes, we rely primarily on interviews with managers and on internally generated performance data. We compare the results of these analyses to those from analyses of post- acquisition operating and stock price performance traditionally applied to large samples. We draw two primary conclusions. (1) Our findings highlight the difficulty of implementing a successful acquisition strategy and of running an effective internal capital market. Post- acquisition difficulties resulted because: (a) managers of the acquiring company did not deeply understand the target company at the time of the acquisition; (b) the acquirer imposed an inappropriate organizational design on the target as part of the post-acquisition integration process; and (c) inappropriate management incentives existed at both the top management and division levels. (2) Measures of operating performance used in large sample studies are weakly correlated with actual post-acquisition operation performance.

Karaesmen, Fikri
PD March 1998. TI Dedication Versus Flexibility in Field Service Operations. AU Karaesmen, Fikri; Van der Duyn, Schouten; Van Wassenhove, Luk N. AA Karaesmen: Universite Pierre et Marie Curie, France. Van der Duyn Schouten, Frank: CentER and Tilburg University. Van Wassenhove: INSEAD. SR Tilburg CentER for Economic Research Discussion Paper: 9824; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 32. PR no charge. JE L85, M11, M21. KW Field Service. Planning. Dedicated Service. Technicians.
AB Field service is gaining importance as after sales service is starting to be recognized as a major source of revenue. This motivates planning problems for companies that employ mobile technicians who provide service on clients' sites. These planning problems share the common characteristic that service levels corresponding to technician response times are explicitly expressed in contracts. Moreover, lately there is strong pressure from clients to have a single dedicated technician who takes full responsibility of the field service. In this paper, the authors provide models that enable the analysis of various trade-offs

between service levels and operational costs under the dedicated service structure. The authors also investigate the tradeoffs between strict dedicated service and more flexible structures to understand the settings for which strict dedication is appropriate.

Karp, Larry
PD October 1997. TI Unemployment and the 'Labour-Management Conspiracy'. AU Karp, Larry; Paul, Thierry. AA Karp: University of California, Berkeley. Paul: Universite d'Aix- Marseille II. SR Centre for Economic Policy Research, Discussion Paper: 1724; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 40. PR 5 pounds or $10.00. JE J58, J68. KW Unemployment. Government Subsidies. Wage Bargaining.
AB Management and a union bargain sequentially, first choosing a contract which will later determine the level of employment, and those choosing a wage. The government then chooses an output subsidy, after which the industry chooses employment according to the contract. The presence of a natural turnover rate in the unionized sector creates unemployment whenever the union wage exceeds the competitive wage. Government intervention can increase both the equilibrium amount of unemployment and worsen the intersectoral allocation of labor. Intervention can also reverse the relation between the equilibrium amount of unemployment and the flexibility of the labor market. Government intervention is especially damaging when labor markets are inflexible. Unemployment weakens, but does not eliminate, the possibility of a 'labor-management conspiracy'.

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

Keely, Louise
PD May 1998. TI Technology in Growth. AU Keely, Louise; Quah, Danny. AA Centre for Economic Performance and London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 391; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 35. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE D92, O31, O33, O34, O40. KW Endogenous Growth. Innovation. Intellectual Property. Patents. Research and Development.
AB The authors review the role of R&D in endogenous growth theory, and describe extant empirical research -- macro and micro -- bearing on R&D as an engine of growth. Taking R&D to be key while recognizing the significance of economic incentives emphasizes knowledge as an economic object and, more generally, the economics of intellectual property rights. This paper argues that property rights matter, but in subtle counterintuitive ways not yet fully investigated in research on endogenous growth.

Kehoe, Patrick
TI Industry Evolution and Transition: A Neoclassical Benchmark. AU Atkeson, Andrew; Kehoe, Patrick.

Kennickell, Arthur B.

PD May 1997. TI Who Uses Electronic Banking? Results from the 1995 Survey of Consumer Finances. AU Kennickell, Arthur B.; Kwast, Myron L. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/35; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 20. PR no charge. JE D12, G21. KW Financial Decisions. Electronic Banking. Technology. Saving. Borrowing.

AB This study uses the 1995 Survey of Consumer Finances to examine households' use of technologies, including electronic means, to transact at a financial institution and to gain information for making saving and borrowing decisions. Household use of various technologies is correlated with household income, financial assets, age, and years of education. Results suggest that relatively new electronic technologies are used by relatively few households, and that household use of electronic sources of information for financial decision making is barely off the ground.

Kessler, Ronald C.

TI The Impact of Psychiatric Disorders on Labor Market Outcomes. AU Ettner, Susan L.; Frank, Richard G.; Kessler, Ronald C.

Kiesling, Lynne L.

PD September 1996. TI Explaining the Rise in Antebellum Pauperism: New Evidence. AU Kiesling, Lynne L.; Margo, Robert A. AA Kiesling: College of William and Mary. Margo: Vanderbilt University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 92; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE H53, I32, N31. KW Pauperism. Poverty. Wages. Economic History. Antebellum.

AB The 1850's witnessed one of the earliest "welfare explosions" in American history. During the decade the "pauper rate" -- the proportion of individuals receiving public assistance -- increased from 5.8 in 1850 to 10.2 in 1860, an increase of 76 percent. Previous attempts to explain the increase in antebellum pauperism have been hampered by the available published data, which are too aggregated to be of much use. This paper explores the determinants of antebellum pauperism using previously unexploited archival data drawn from the manuscript censuses of social statistics. These records provided detailed evidence on the incidence of pauperism at the county level. The authors find that about half of the increase in pauperism can be attributed to falling real wages during the decade. Contributing factors were increased immigration and urbanization.

Kiley, Michael T.

PD April 1997. TI Efficiency Wages, Nominal Rigidities, and the Cyclical Behavior of Real Wages and Marginal Cost. AA Federal Reserve Board. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/24; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 6. PR no charge. JE E24, E31, E32. KW Efficiency Wages. Nominal Price Rigidity. Business Cycles.

AB The author presents a model in which efficiency wages generate acyclical real wages, but do not lower the sensitivity of marginal cost to output or increase price stickiness. Consideration of previous models suggests that efficiency wages are a poor real rigidity.

PD August 1997. TI Staggered Price Setting and Real Rigidities. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series: 1997/46; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/feds/. PG 29. PR no charge. JE E10, E31, E32. KW Nominal Price Rigidity. Indeterminacy. Price Setting.

AB This paper emphasizes the notion that model features that contribute to endogenous price rigidity under staggered price setting lower the elasticity of marginal cost with respect to output, and these same model features tend to generate equilibrium indeterminacy, or "sunspot fluctuations", under price flexibility. Using this insight, staggered price setting is shown to imply persistent output responses to monetary shocks for certain parameterizations of one and two sector models with small increasing returns or countercyclical markups, and other model features that would contribute to persistence are discussed.

PD September 1997. TI The Supply of Skilled Labor and Skill-Biased Technological Progress. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series: 1997/45; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 17. PR no charge. JE J31, O33, O40. KW Wage Inequality. Endogenous Growth. Labor Supply. Technological Change.

AB Rising inequality in the relative wages of skilled and unskilled labor is often attributed to skill-biased technological progress. This paper presents a model in which the adoption of skill-biased or "unskilled-biased" technologies is endogenous. Conventional wisdom states that an increase in the supply of skilled labor lowers the relative wage of skilled to unskilled labor. In this paper, an increase in the supply of skilled labor leads to temporary stagnation in the wages of unskilled workers and an expanding gap between the wages of skilled and unskilled workers through an acceleration of skill-biased technological change.

Kilian, Lutz

TI Measuring Predictability: Theory and Macroeconomic Applications. AU Diebold, Francis X.; Kilian, Lutz.

Kim, Jinill

TI The Choice of a Monetary Policy Reaction Function in a Simple Optimizing Model. AU Henderson, Dale W.; Kim, Jinill.

Kim, Yong-Gwan

TI Evolution of Communication With Partial Common Interest. AU Blume, Andreas; DeJong, Douglas V.; Kim,

Yong-Gwan; Sprinkle, Geoffrey B.

Kimball, Miles S.
TI   Cyclical Productivity with Unobserved Input Variation.
AU   Basu, Susanto; Kimball, Miles S.

Klau, Marc
TI   Some Multi-Country Evidence on the Effects of Real Exchange Rates on Output. AU   Kamin, Steven B.; Klau, Marc.

Kleijnen, Jack P. C.
PD   December 1997. TI   A Methodology for Fitting and Validating Metamodels in Simulation. AU   Kleijnen, Jack P. C.; Sargent, Robert G. AA   Kleijnen: CentER and Tilburg University. Sargent: Syracuse University. SR   Tilburg CentER for Economic Research Discussion Paper: 97116; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG   37. PR   no   charge. JE   C15,   C52,   C67. KW   Simulation.   Approximation.   Response   Surface. Modeling. Regression.
AB   This expository paper discusses the relationships among metamodels, simulation models and problem entities. A metamodel or response surface is an approximation of the input/output function implied by the underlying simulation model. There are several types of metamodel: linear regression, splines, neural networks, etc. This paper distinguishes between fitting and validating a metamodel. Metamodels may have different goals: (i) understanding, (ii) prediction, (iii) optimization, and (iv) verification and validation. For this metamodeling, a process with thirteen steps is proposed. Classic design of experiments (DOE) is summarized, including standard measures of fit such as the R-square coefficient and cross-validation measures. This DOE is extended to sequential or stagewise DOE. Several validation criteria, measures, and estimators are discussed. Metamodels in general are covered, along with a procedure for developing linear regression (including polynomial) metamodels.

PD   March 1998. TI   Maximizing the Simulation Output: A Competition. AU   Kleijnen, Jack P. C.; Pala, Ozge. AA   CentER and Tilburg University. SR   Tilburg CentER for Economic Research Discussion Paper: 9815; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG   8. PR   no charge. JE   C44, C51, C60. KW   Experiment Design. Regression. Simulation.
AB   The Business Section of the VVS (Netherlands Society for Statistics and Operations Research) organized the following competition. Maximize the output of a given simulation model by selecting the best combination of six inputs; only 32 runs are permitted. Participants in this competition came from industry and academia; actually twelve teams competed. This paper is written by the winning team, explaining its design and analysis. That design proceeds in stages. First, Rechschaffner's saturated design for estimating all main effects and two-factor interactions is used. Then factors are changed one at a time to estimate quadratic effects. Finally, the estimated second-order polynomial is used to estimate the optimal input combination.

PD   March 1998. TI   Validation of Simulation, With and

Without Real Data. AA   CentER and Tilburg University. SR   Tilburg CentER for Economic Research Discussion Paper: 9822; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG   22. PR   no   charge. JE   C15,   C52. KW   Verification.   Credibility.   Assessment.   Sensitivity. Robustness.
AB   This paper gives a survey on how to validate simulation models through the application of mathematical statistics. The type of statistical test actually applied depends on the availability of data on the real system: (i) no data, (ii) only output data, and (iii) both input and output data. In case (i), the system analysts can still experiment with the simulation model to obtain simulated data. Those experiments should be guided by the statistical theory on design of experiments (DOE). In case (ii), real and simulated output data may be compared through the well-known Student t statistic. In case (iii), trace-driven simulation becomes possible. Then validation, however, should not proceed as follows: make a scatter plot with real and simulated outputs, fit a line, and test whether that line has unit slope and passes through the origin. Instead, better tests are presented.

TI   New Species of Hybrid Pull Systems. AU   Gaury, E. G. A.; Pierreval, H.; Kleijnen, Jack P. C.

Klemperer, Paul
PD   August 1997. TI   Almost Common Value Auctions: The 'Wallet Game' and its Applications to Takeover Battles and Airwaves Auctions. AA   St Catherine's College, University of Oxford. SR   Centre for Economic Policy Research, Discussion Paper: 1682; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG   24. PR   5 pounds or $10.00. JE   D44, G34, L96. KW   Auction Theory. Winner's Curse. Takeovers. Corporate Acquisitions. Spectrum Auction. Airwaves Auction.
AB   We use a classroom game, the 'Wallet Game', to show that in standard ascending, i.e. English, auctions of close-to-common-values objects, even slight asymmetries between bidders can have very large effects on prices. Examples of small asymmetries are a small value advantage for one bidder or a small ownership of the object by one bidder; the effects of these asymmetries are greatly exacerbated by entry costs or bidding costs. We discuss applications to airwaves auctions and takeover battles including the Glaxo-Wellcome merger.

Klette, Tor Jakob
PD   February 1997. TI   Empirical Patterns of Firm Growth and R&D Investment: A Quality Ladder Model Interpretation. AU   Klette, Tor Jakob; Griliches, Zvi. AA   Klette: Norwegian School of Economics. Griliches: Harvard University and National Bureau of Economic Research. SR   National Bureau of Economic Research Working Paper: 5945; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG   25. PR $5.00. JE   D21, D43, L10, L13. KW   Productivity.
AB   We present a model of endogenous firm growth with R&D investment and innovation as the engine of growth. The objective of our analysis is to present a framework that can be used for microeconometric analysis of firm performance in high-tech industries. The model for firm growth is a partial

equilibrium model drawing on the quality ladder models in the macro growth literature, but also on the literature on patent races and the discrete choice models of product differentiation. We examine to what extent the assumptions and the empirical content of our model are consistent with the findings that have emerged from empirical studies of growth, productivity, R&D and patenting at the firm level. The analysis shows that the model fits well empirical patterns such as (i) a skewed size distribution of firms with persistent differences in firm sizes, (ii) firm growth (roughly) independent of firm size (the so-called Gibrat's law) and (iii) R&D investment proportional to sales, as well as a number of other empirical patterns.

Klijn, Flip
TI   On the Balancedness of M-Sequencing Games.
AU   Hamers, Herbert; Klijn, Flip; Suijs, Jeroen.

Klomp, Luuk
TI   Do Services Differ From Manufacturing? The Post-Entry Performance of Firms in Dutch Services. AU   Audretsch, David B.; Thurik, A. Roy; Klomp, Luuk.

Kobayakawa, Shuji
PD   July 1997. TI   The Comparative Analysis of Settlement Systems. AA   Merton College, University of Oxford and the Bank of Japan. SR   Centre for Economic Policy Research, Discussion Paper: 1667; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG   76. PR   5 pounds or $10.00. JE   G29. KW   Settlement Risk. RTGS. Intraday Liquidity. Risk Management.
AB   After a rapid expansion of financial transactions, both the authorities and financial institutions became aware of the risk involved in interbank settlement systems. To cope with the risk the systems in most economies have been designed so that large-sized payments are settled in the real time gross settlement (RTGS) mode, whereas small ones are dealt with in the designated time net settlement system. Yet the introduction of the RTGS system imposes substantial costs of maintaining intraday liquidity on participants, which creates a fear among European as well as Japanese banking communities that they might lose competitiveness against their US counterparts whose main settlement system, Fedwire, does not require collateral. We first compare these different settlement systems from the participant's cost-benefit perspective and see if this concern always holds. Second, we develop the same framework to analyze the net settlement system, and then suggest if there is a rationale behind the coexistence of both the RTGS and net settlement systems.

Kohli, Ulrich
PD   August 1997. TI   Trade and Migration: A Production-Theory Approach. AA   University of Geneva. SR   Centre for Economic Policy Research, Discussion Paper: 1684; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V   7DB,   United   Kingdom.   Website: www.cepr.demon.co.uk. PG   48. PR   5 pounds or $10.00. JE   C51, E23, F11, F22. KW   Guestworkers. Imports. Aggregate   Production.   Substitution.   Complementarity. Smoothing.
AB   This paper integrates the production-theory approach to import determination and the production theory approach to immigration. The aggregate technology is described by a four-input translog cost function, from which the demand for imports and the demand for foreign labor services can be jointly derived. Empirical estimates are reported for Switzerland. Special care is taken to describe the substitution and complementarity relationships between the four inputs under alternative hypotheses. The issue of flexibility with respect to time is also examined.

Kokko, Ari
TI   Regional Integration and Foreign Direct Investment. AU   Blomstrom, Magnus; Kokko, Ari.

Kongsamut, Piyabha
TI   Beyond Balanced Growth. AU   Rebelo, Sergio; Kongsamut, Piyabha; Xie, Danyang.

Koopman, Siem Jan
PD   March 1998. TI   Fast Filtering and Smoothing for Multivariate State Space Models. AU   Koopman, Siem Jan; Durbin, J. AA   Koopman: CentER and Tilburg University. Durbin: London School of Economics. SR   Tilburg CentER for Economic Research Discussion Paper: 9818; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm.   PG   20.   PR   no charge. JE   C22, C32, C50. KW   Diffuse Initialization. Kalman Filter. Multivariate Models. Smoothing. State Space.
AB   This paper gives a new approach to diffuse filtering and smoothing for multivariate state space models. The standard approach treats the observations as vectors while the authors approach treats each element of the observational vector individually. This strategy leads to computationally efficient methods for multivariate filtering and smoothing. Also, the treatment of the diffuse initial state vector in multivariate models is much simpler than existing methods. The paper presents details of relevant algorithms for filtering, prediction and smoothing. Proofs are provided. Three examples of multivariate models in statistics and economics are presented for which the new approach is particularly relevant.

PD   April 1998. TI   Modelling Bid-Ask Spreads in Competitive Dealership Markets. AU   Koopman, Siem Jan; Lai, Hung Neng. AA   Koopman: CentER and Tilburg University. Lai: London School of Economics. SR   Tilburg CentER for Economic Research Discussion Paper: 9832; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands.   Website: cwis.kub.nl/few5/center/center.htm. PG   40.   PR   no   charge.   JE   C51,   G12. KW   Microstructure.   Pricing.   Spreads.   Kalman   Filter. Dealership Markets.
AB   This paper introduces a new approach to the estimation of the bid-ask spread in competitive dealership markets. In such markets, several transactions may take place simultaneously within the same time interval so that observed prices can not be ordered sequentially. Therefore, the standard approach of estimating spread using differenced prices can not be used without losing a considerable amount of information. The authors propose an alternative method to model the price behavior for which data differencing is not needed. This new method is flexible in two ways. Firstly, it can accommodate linear and non-linear cross-sectional properties of the data. Secondly, it can explore the time series properties for data with missing values and for data which may not be ordered

sequentially over time. The authors consider a statistical model for security prices which explicitly takes account of the empirical features of the spread such as trade size and intra-day effects.

Kort, Peter M.

TI   A Further Analysis on Strategic Timing of Adoption of New Technologies Under Uncertainty. AU   Huisman, Kuno J. M.; Kort, Peter M.

Kosfeld, Michael

TI   Regret Equilibria in Games. AU   Droste, Edward; Kosfeld, Michael; Voorneveld, Mark.

PD   March   1998.   TI   Rumours   and   Markets. AA   CentER and Tilburg University.   SR   Tilburg CentER for Economic Research Discussion Paper: 9823; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm.   PG   25.   PR   no charge.   JE   D11, D51.   KW   Rumor. Random Preference. Exchange Economy. Equilibrium Price.
AB   This paper studies the effects of rumors on markets. The authors consider a large population of agents who participate in a two-good exchange economy. Agents communicate with their local neighbors which gives rise to the possible spread of a rumor that has a direct impact on economic variables, such as market demand and market equilibrium prices. If the rumor dies out (long-run) equilibrium prices correspond to fundamental values, while prices differ from fundamentals if the rumor stays present. When rumor effects are strong the market crashes, in the sense that trade breaks down as the ratio of relative prices converges to zero.

Koster, Maurice

PD   January 1998.   TI   Multi-Service Serial Cost Sharing: A Characterization of the Moulin-Shenker Rule. AA   CentER and Tilburg University.   SR   Tilburg CentER for Economic Research Discussion Paper: 9806; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000   Le   Tilburg,   The   Netherlands.   Website: cwis.kub.nl/few5/center/center.htm.   PG   15.   PR   no charge.   JE   C69, D49.   KW   Serial Costs. Cost Sharing. Multi-Service Facilities.
AB   The authors focus on the Moulin-Shenker cost sharing mechanism as a natural extension of the serial mechanism to multi-service facilities where services are personalized. The show that it is the unique regular mechanism that is compatible with the serial principle, scale invariance and self consistency.

PD   March 1998.   TI   Core Representations of the Standard Fixed Tree Game. AU   Koster, Maurice; Molina, E.; Sprumont, Y.; Tijs, S. AA   Koster and Tijs: CentER and Tilburg University. Molina: Universidad Miguel Hernandez. Sprumont: Universite de Montreal.   SR   Tilburg CentER for Economic Research Discussion Paper: 9821; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm.   PG   27.   PR   no charge.   JE   C71.   KW   Cooperative Games. Game Theory. Tree Games. Core. Egalitarian Solutions.
AB   This paper discusses the core of the game corresponding to the standard fixed tree problem. The authors introduce the concept of a weighted egalitarian solution. The notion of

home-down allocation is developed to create further insight into the local behavior of the weighted constrained egalitarian allocation. A similar and dual approach by the notion of down-home allocations gives us the class of weighted Shapley values. The constrained egalitarian solution is characterized in terms of a cost sharing mechanism.

Kramarz, Francis

TI   Moment Estimation with Attrition. AU   Abowd, John M.; Kramarz, Francis; Crepon, Bruno.

Krieger, Reva

TI   Asymmetric   Adjustments   of   Price   and   Output. AU   Tinsley, P. A.; Krieger, Reva.

Krueger, Alan B.

PD   February 1997.   TI   Labor Market Shifts and the Price Puzzle Revisited.   AA   Princeton University and National Bureau of Economic Research.   SR   National Bureau of Economic Research Working Paper: 5924; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org.   PG   20.   PR $5.00. JE   J31.   KW   Labor Studies.
AB   This paper examines the relationship between price growth and skill intensity across 150 manufacturing industries between 1989 and 1995. There are two main findings. First, wage growth and intermediate goods price increases are passed through to final product prices roughly in proportion to their factor shares. Second, product prices have grown relatively less in sectors that more intensively utilize less-skilled labor. The latter finding is consistent with the Stolper-Samuelson theory of expanded trade with countries that are abundant in less-skilled workers, as well as with some models of technological change.

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

Krueger, Anne O.

PD   March 1997.   TI   Nominal Anchor Exchange Rate Policies as a Domestic Distortion.   AA   Stanford University and National Bureau of Economic Research.   SR   National Bureau of Economic Research Working Paper: 5968; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org.   PG   37. PR $5.00.   JE   F31.   KW   International   Finance. Macroeconomics.
AB   This paper analyzes a nominal anchor exchange rate policy as a domestic distortion, in the tradition of international trade theory. It is shown that, in addition to the problems of sustainability and exit pinpointed in the exchange rate literature, a nominal anchor exchange rate policy, while in force, drives a wedge between the domestic and the international intertemporal marginal rates of substitution. The welfare cost of the Mexican use of the nominal anchor exchange rate policy prior to December 1994 is then estimated.

Kuo, Biing-Shen

PD   October 1997.   TI   The Behaviour of the Real Exchange Rate: A Re-Examination Using Finite Sample Approach.   AU   Kuo, Biing-Shen; Mikkola, Anne. AA   Kuo: National Chengchi University. Mikkola: University of Helsinki.   SR   Centre for Economic Policy Research,

Discussion Paper: 1716; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 40. **PR** 5 pounds or $10.00. **JE** C22, C52, F31, F47. **KW** Real Exchange. Unit Root. Purchasing Power Parity.

AB The results of this paper complement the recent findings of real exchange rates as stationary processes. The standard procedure of applying a battery of unit root tests can be problematic since the tests are sensitive to the specifics of the time-series process. The novelty of the approach we applied in this paper is in emphasizing the information content of the data in distinguishing between the competing processes. Stationary and non-stationary ARIMA processes are fitted to the US/UK real exchange rate series covering 134 years. Artificial data following these two processes are generated, and the small sample distributions of the chosen test statistics (including the most powerful point optimal tests with both the unit root and the stationarity as a null) are computed under each of the two hypotheses. The values of the actual sample statistics are shown to be more likely to come from the stationary process than from the non-stationary one.

Kwast, Myron L.

TI Who Uses Electronic Banking? Results from the 1995 Survey of Consumer Finances. **AU** Kennickell, Arthur B.; Kwast, Myron L.

Lai, Hung Neng

TI Modelling Bid-Ask Spreads in Competitive Dealership Markets. **AU** Koopman, Siem Jan; Lai, Hung Neng.

Laidler, David

PD August 1998. **TI** Fabricating the Keynesian Revolution: An Overview. **AA** University of Western Ontario. **SR** University of Western Ontario, Papers in Political Economy: 84; Department of Economics, University of Western Ontario, London, Ontario N6A 5C2, Canada. **PG** 44. **PR** no charge. **JE** B22, N12. **KW** Keynes. Economic History.

AB To the extent that the following studies yield lessons, they are: that the macro-economics of the interwar years was the product of many intellects, and that rather than being swept away by a Keynesian Revolution, key features of that body of thought were in fact synthesized into a simple and easily grasped IS-LM model, around which debates could be, and were, organized for the next thirty years or so. To argue that an important branch of economics should have evolved in an untidy and piecemeal fashion out of the interactions of many contributors does not make for as much drama as the alternative of its being destroyed and then reborn as the result of the super-human efforts of a single creator. Perhaps, however one should not be surprised that this way of telling the story of the 1920's and 1930's seems the more accurate one.

Lamont, Owen

PD March 1997. **TI** Leverage and House-Price Dynamics in U.S. Cities. **AU** Lamont, Owen; Stein, Jeremy C. **AA** Lamont: University of Chicago and National Bureau of Economic Research. Stein: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5961; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website:

www.nber.org. **PG** 25. **PR** $5.00. **JE** E44, G32, R31. **KW** Corporate Finance.

AB In this paper, we use city-level data to analyze the relationship between homeowner borrowing patterns and house-price dynamics. Our principal finding is that in cities where homeowners are more leveraged -- i.e., have higher loan-to-value ratios -- house prices react more sensitively to city-specific shocks, such as changes in per-capita income. This finding is consistent with recent theories which emphasize the role of collateralized borrowing in shaping the behavior of asset prices.

Lamoreaux, Naomi R.

PD February 1997. **TI** Location and Technological Change in the American Glass Industry During the Late Nineteenth and Early Twentieth Centuries. **AU** Lamoreaux, Naomi R.; Sokoloff, Kenneth L. **AA** University of California, Los Angeles and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5938; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** $5.00. **JE** L61, N61, O31. **KW** Development of the American Economy.

AB Scholars have attempted to explain geographic clustering in inventive activity by arguing that it is connected with clustering in production or new investment. They have offered three possible reasons for this link: because invention occurs as a result of learning by doing; because new investment encourages experimentation with novel techniques; and because there are local information flows that make inventors more fertile in areas where producers are concentrated. In this article we test these theories by studying geographic patterns of production and invention in the glass industry during the late nineteenth and early twentieth centuries. We find that the patterns deviate significantly from what the theories would predict, and offer the alternative hypothesis that inventive activity proceeded most intensively in areas where markets for technology had developed most fully -- that is, where there were localized networks of institutions that mobilized information about technological opportunities and mediated relations among inventors, suppliers of capital, and those who would commercially develop or exploit new technologies.

PD April 1997. **TI** Inventors, Firms, and the Market for Technology: U.S. Manufacturing in the Late Nineteenth and Early Twentieth Centuries. **AU** Lamoreaux, Naomi R.; Sokoloff, Kenneth L. **AA** University of California, Los Angeles and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 98; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** $5.00. **JE** L33, N61, N71, O31, O32. **KW** Development. Economic History. Technology. Research and Development.

AB Recent scholarly literature explains the spread of in-house research laboratories during the early twentieth century by pointing to the information problems involved in contracting for technology. The authors argue, by contrast, that these difficulties have been overemphasized -- that, in fact, a substantial trade in patented inventions developed over the course of the nineteenth century. This expansion of trade in technology made possible a growing division of labor, as inventors focused their energies and resources on invention

itself. Although it is true that large firms were also beginning by the early twentieth century to invest in developing their internal inventive capabilities, in doing so they faced a number of significant problems. Most importantly, they had to overcome resistance to contracts requiring employees to sign over patents to their employers, and they had to reduce the high turnover rates that made such requirements effectively unenforceable.

Lancaster, Kelvin
PD January 1998. TI How More Taxes Can Be Better Than Less: A Note on Aggregating Deadweight Losses. AA Columbia University. SR Columbia University, Department of Economics Discussion Paper Series: 9798/09; Department of Economics, Columbia University, 420 West 118 Street, Room 1022, New York, NY 10027. Website: www.columbia.edu/cu/economics. PG 10. PR $4.00 U.S.; $5.00 Canada; $7.00 All other countries. JE H21, H22, H23. KW Taxation. Deadweight Loss.
AB There is a deadweight loss from imposing a tax on a single commodity, but there is no such loss from a uniform tax on all commodities with lump-sum return, and obviously no loss if no commodity is taxed. The object of this paper is to weave a consistent story relating these three well-established propositions, something that has hitherto been lacking. Using a simple general equilibrium model with a CES utility function, it is shown that, as more goods are taxed: (1) The deadweight loss per dollar of revenue falls monotonically, and (2) the aggregate deadweight loss rises to a maximum, then falls to zero. In particular, it is sometimes better to tax more goods than to eliminate taxes on existing ones.

Lane, Julia
TI The Reallocation of Labour and the Lifecycle of Firms.
AU Burgess, Simon; Lane, Julia; Stevens, David.

TI. Jobs, Workers and Changes in Earnings Dispersion.
AU Burgess, Simon; Lane, Julia; Stevens, David.

Lanjouw, Jean O.
PD August 1997. TI The Introduction of Pharmaceutical Product Patents in India: Heartless Exploitation of the Poor and Suffering? AA Yale University. SR Yale Economic Growth Center Discussion Paper: 775; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 53. PR $2.00 plus postage. JE F13, F42, L65, O34. KW Product Patents. Pharmaceuticals. Innovations. Development. India.
AB The decision to require that countries grant product patents for pharmaceutical innovations as a condition of membership in the World Trade Organization was very contentious. Almost fifty developing countries were not granting patent monopolies for drugs during the period the Uruguay round of GATT was being debated and these countries resisted the inclusion of this requirement, claiming that vastly higher drug prices would be associated with such patents. On the other side, business interests in the West urged them to consider the beneficial effects such protection might bring both in terms of focusing more research on tropical diseases and encouraging greater domestic and foreign investment in local research. This paper discusses the various theoretical implications for a developing country of introducing product patents for pharmaceuticals. Using India as an example, it then

brings together information gathered from published sources and personal interviews to examine the potential magnitude of these effects.

PD April 1998. TI Untitled: A Study of Formal and Informal Property Rights in Urban Ecuador. AU Lanjouw, Jean O.; Levy, Philip I. AA Yale University. SR Yale Economic Growth Center Discussion Paper: 788; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 69. PR $2.00 plus postage. JE D23, D40, H11, O17, R21. KW Property Rights. Transactions. Land Titling. Ecuador.
AB This paper explores the substitutability of formal and informal property rights. The authors analyze new survey data from Ecuador, where households have both formal and informal claims to urban residential property. The authors first develop a theory of the ability to sell or rent land in which a distinction is drawn between transferable property rights and non-transferable claims. They use this theory of transactions to show that the increase in price that follows the granting of title may be an overestimate of the households' utility gain. In their empirical work the authors find that the unconditional effect of granting title is to raise properties' value by 23.5%. However, they also find that informal property rights can substitute effectively for formal property rights, so the marginal effect of titling on the ability to transact and on prices can vary widely among communities and among households within a community.

Lanzona, Leonardo A.
PD October 1997. TI The Effects of Transaction Costs on Labor Market Participation and Earnings: Evidence From Rural Philippine Markets. AU Lanzona, Leonardo A.; Evenson, Robert E. AA Lanzona: Ateneo de Manila University. Evenson: Yale University. SR Yale Economic Growth Center Discussion Paper: 790; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 25. PR $2.00 plus postage. JE J10, J22, J23, J31. KW Transaction Costs. Labor Markets. Wages. Income. Philippines.
AB The paper aims to measure transaction costs and its effects on labor market participation and on wage earnings. The observed differences between buying and selling prices of rice across households are used to calculate transaction costs indices for villages which are incorporated into the standard labor market participation and Mincer wage equations. The estimates indicate that transaction costs may be a source of the income differentials between (a) the landed and the landless, (b) the rural and the urban areas, and (c) the males and the females.

Leahy, Dermot
PD July 1997. TI R&D Spillovers and the Case for Industrial Policy in an Open Economy. AU Leahy, Dermot; Neary, J. Peter. AA University College Dublin. SR Centre for Economic Policy Research, Discussion Paper: 1671; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 36. PR 5 pounds or $10.00. JE F12, L13. KW R&D Spillovers. Industrial Policy. Trade Policy.
AB In this paper we consider the case for subsidies towards firms which generate R&D spillovers in open economies. We show that in the presence of strategic Behaviour by firms many

expected results are overturned. Local R&D spillovers to other domestic firms may justify an R&D tax rather than a subsidy; R&D cooperation by local firms over-internalizes the externality and also justifies an R&D tax; and international spillovers which benefit foreign firms may justify a subsidy, even though the government cares only about the profits of home firms.

Legros, Patrick
PD March 1998. TI Monotone Matching in Perfect and Imperfect Worlds. AU Legros, Patrick; Newman, Andrew F. AA Legros: Universite de Liege. Newman: Columbia University. SR Columbia University, Department of Economics Discussion Paper Series: 9798/14; Department of Economics, Columbia University, 420 West 118 Street, Room 1022 IAB, New York, NY 10027. Website: www.columbia.edu/cu/economics. PG 53. PR $4.00 U.S.; $5.00 Canada; $7.00 All other countries. JE C68, C78, D43. KW Matching Models. Market Imperfections. Production. Distribution.
AB The authors study frictionless matching models in large production economies with and without market imperfections and/or incentive problems. They provide necessary and sufficient distribution-free conditions for monotone matching which depend on the relationship between what they call the segregation payoff -- a generalization of the individually rational payoff -- and the feasible set for a pair of types. The authors' approach yields some new techniques for computing equilibria, particularly when utility is not transferable. It also helps to underscore the effects of imperfections, which have two distinct effects that are relevant for equilibrium matching patterns: they can overwhelm the complementarity properties of the production technology and they can introduce nontransferabilities that make equilibrium matching inefficient. They also use their framework to reveal the source of differences in the comparative static properties of some models in the literature and to explore the effects of distribution on the equilibrium matching pattern.

Lehmann, Hartmut
PD September 1998. TI Grime and Punishment: Job Insecurity and Wage Arrears in the Russian Federation. AU Lehmann, Hartmut; Wadsworth, Jonathan; Acquisti, Alessandro. AA Lehmann: Trinity College, Dublin. Wadsworth: Centre for Economic Performance and London School of Economics. Acquisti: University of Michigan Business School. SR London School of Economics, Centre for Economic Performance Discussion Paper: 403; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 41. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE J23, J31, J33, J64. KW Job Insecurity. Wage Arrears. Labor Markets. Transition Economies. Russia.
AB The initial years of transition in the Russian Federation have been characterized by relatively smaller falls in employment than in other reform-orientated countries of eastern Europe. Using information form two complementary household survey data sets, the authors show that for many Russian workers, the dominant form of labor market adjustment has instead been the delayed receipt of wages. Wage arrears are found across the private, state and budgetary sector in approximately equal proportions. There are large regional

variations in the incidence of wage arrears. There is less evidence that individual characteristics contribute much toward the incidence of wage arrears. There is evidence that the persistence of arrears is concentrated on a subset of the working population. The authors show that workers can only exercise the exit option of a job quit from a firm paying wages in arrears if the outside labor market is sufficiently dynamic.

Leonard, David K.
TI Institutional Solutions to the Principal-Agent Problem in African Health Care. AU Leonard, Kenneth L.; Leonard, David K.

Leonard, Kenneth L.
PD February 1998. TI African Traditional Healers: Incentives and Skill in Health Care Delivery. AA Columbia University. SR Columbia University, Department of Economics Discussion Paper Series: 9798/13; Department of Economics, Columbia University, 420 West 118 Street, Room 1022 IAB, New York, NY 10027. Website: www.columbia.edu/cu/economics. PG 25. PR $4.00 U.S.; $5.00 Canada; $7.00 All other countries. JE D82, I11, I12. KW Traditional Healers. Health Care. Incentives. Africa.
AB The benefit of health care comes not just from the ability of health care providers to produce health but also from their motivation to do so. The fact that traditional healers in Africa are paid on the basis of health outcomes not services provided changes their incentives compared to those of modern health care providers. This paper documents these payment methods in Cameroon and explores the different incentives faced by practitioners in government and church-based facilities as well as traditional healers. To test whether such incentives make a difference in the provision of health care the author uses a multinomial logit analysis of an original data set from Cameroon and shows that patients choose practitioners as if they were aware of the difference in incentives. Thus, though patients cannot perfectly evaluate the quality of health they receive or would have received, they can evaluate expected quality by examining incentives.

PD July 1998. TI Institutional Structure of Health Care in Rural Cameroon: Structural Estimation of Production in Teams with Unobservable Effort. AA Columbia University. SR Columbia University, Department of Economics Discussion Paper Series: 9798/16; Department of Economics, Columbia University, 420 West 118 Street, Room 1022 IAB, New York, NY 10027. Website: www.columbia.edu/cu/economics. PG 38. PR $4.00 U.S.; $5.00 Canada; $7.00 All other countries. JE D82, I11, I12, O20. KW Traditional Healers. Institutions. Health Care. Contracts. Imperfect Information.
AB Traditional healers in Cameroon are paid on an outcome-contingent basis, where payments are linked to recovery. On the other hand, organizational providers are paid a fixed fee at the time of consultation. The authors suggest that contingent-payment contracts are appropriate for some health production technologies and that fixed fee contracts are appropriate for other technologies, where a technology in health care is the medical response indicated by a set of presenting conditions. They fit a contractual model of health care demand to data on observed patterns of provider and contract choice using a Conditional Logit. Effort exerted on behalf of the patient's health is unobservable and is therefore only delivered according to the incentives that exist within the

implicit contract between patient and provider. Patients create an approximate market for medical effort by choosing between discrete contract types. Institutions play an essential role in the creation of credible quality.

PD October 1998. TI Institutional Solutions to the Principal-Agent Problem in African Health Care. AU Leonard, Kenneth L.; Leonard, David K. AA Leonard, K.: Columbia University. Leonard, D.: University of California, Berkeley. SR Columbia University, Department of Economics Discussion Paper Series: 9899/02; Department of Economics, Columbia University, 420 West 118 Street, Room 1022 IAB, New York, NY 10027. Website: www.columbia.edu/cu/economics. PG 45. PR $4.00 U.S.; $5.00 Canada; $7.00 All other countries. JE D20, D82, I11, I12, O20. KW Institutions. Health Care. Principal-Agent. Adverse Selection. Moral Hazard.

AB Free markets for health care in Africa do not function properly, in that patients exhibit willingness to pay for health care and yet practitioners are unable to sell their services. When issues of agency are not resolved we find practitioners specializing in the sale of pharmaceuticals but not using their skills as diagnosticians. Mechanisms that can reduce agency cost are beneficial to both patients and practitioners. This paper draws on theory and empirical evidence to examine what institutions are necessary to solve the problems of imperfect information in this context. Theory suggests that self-regulation by professional bodies should arise as privatization continues. Empirical evidence, however, suggests that this conclusion is overly-optimistic. On the other hand, referral networks perform much the same function but do not require centralized control. The most successful institution for the delivery of quality medical care in Africa is that of independent, pre-existing value-based organizations (missions).

Lettau, Martin
TI Preferences, Consumption Smoothing, and Risk Premia. AU Uhlig, Harald; Lettau, Martin.

Leuven, Edwin
TI Wages and the Bargaining Regime in a Corporatist Setting: The Netherlands. AU Hartog, Joop; Leuven, Edwin; Teulings, Coen.

PD May 1998. TI Explaining International Differences in Male Wage Inequality by Differences in Demand and Supply of Skill. AU Leuven, Edwin; Oosterbeek, Hessel; van Ophem, Hans. AA University of Amsterdam. SR London School of Economics, Centre for Economic Performance Discussion Paper: 392; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 15. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE J10, J22, J23, J24, J31. KW Wages. Inequality. Skill. Labor Markets.

AB According to Blau and Kahn (1996) international differences in male wage inequality cannot be explained by a simple model of supply and demand for skill. The authors provide compelling evidence that this conclusion is due to employing an inappropriate measure of skill. Their measure is based on the strong assumption that years of schooling and years of experience are comparable across countries. This paper employs a direct skill measure obtained from an international comparative literacy test. Using this alternative measure of skill, the authors find that international differences in male wage inequality by skill between the U.S. on the one hand, and Canada, Germany, the Netherlands, Sweden and Switzerland on the other hand, are consistent with relative differences in demand and supply of skill.

Levin, Andrew T.
TI The Evolution of Macro Model at the Federal Reserve Board. AU Brayton, Flint; Levin, Andrew T.; Tryon, Ralph; Williams, John C.

TI Macroeconomic Implications of Competitive College Admissions. AU Iyigun, Murat F.; Levin, Andrew T.

Levitt, Steven D.
TI Measuring Positive Externalities From Unobservable Victim Precaution: An Empirical Analysis of Lojack. AU Ayres, Ian; Levitt, Steven D.

Levy, Philip I.
TI Untitled: A Study of Formal and Informal Property Rights in Urban Ecuador. AU Lanjouw, Jean O.; Levy, Philip I.

Lewis, Karen K.
PD April 1997. TI Are Countries with Official International Restrictions "Liquidity Constrained?" AA University of Pennsylvania and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5991; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 29. PR $5.00. JE F31, G12. KW Asset Pricing. International Finance. Macroeconomics.

AB In this paper, I empirically examine consumption smoothing behavior across a broad group of countries using a unique data set that indicates whether residents in a country face an official government restriction. I then ask whether the ex ante consumption movements among restricted countries differ from those of unrestricted countries. To gauge the departure from standard consumption smoothing, I use the Campbell and Mankiw (1989, 1991) approach of regressing consumption growth on income growth and instrumenting with lagged variables. Interestingly, I find that consumption growth for residents in countries that impose international restrictions has a significantly higher coefficient on income growth than for residents in countries without those restrictions. Thus, a greater proportion of consumers facing international restrictions appear to act as though they are liquidity constrained according to the Campbell and Mankiw approach. I also discuss alternative interpretations that do not depend upon liquidity constraints.

Li, David D.
PD June 1997. TI Taxes and Government Incentives: Eastern Europe Versus China. AU Li, David D.; Gordon, Roger H. AA University of Michigan. SR Centre for Economic Policy Research, Discussion Paper: 1657; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 32. PR 5 pounds or $10.00. JE D78, H30, P51. KW Transition Economies. Government Incentives. Principal-Agent Models. Taxes.

AB Local officials in China have strongly supported new

non-state firms, yet other officials in transition countries have often strongly hindered them. We argue that a likely cause of these sharp differences in behavior is differences in the source of government revenue. Local revenue in China came from profits and other taxes on new entrants, while elsewhere in transition countries tax revenue came disproportionately from the old state enterprises. All these officials can easily draw on public funds for personal use. As a result, local Chinese officials have a personal interest in encouraging the development of new firms, while other officials have a financial interest in suppressing new firms. To induce officials to be supportive of new firms, the model suggests raising the effective tax rate on them. Surprisingly, past work has ignored the role of the tax system in influencing the incentives faced by government officials.

PD June 1997. TI Government Distributional Concerns and Economic Policy During the Transition from Socialism. AU Li, David D.; Gordon, Roger H. AA University of Michigan. SR Centre for Economic Policy Research, Discussion Paper: 1662; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 40. PR 5 pounds or $10.00. JE H10, H20, H30, O52, P50. KW Economic Transition. Transition. Redistribution. Wage Structure. Labor Productivity.
AB Before the transition governments had strong distributional objectives, which they pursued mainly by direct controls over state enterprise wage rates and hiring decisions, yielding a highly compressed wage distribution. During the reform they maintained similar controls over state enterprises, but had to take into account competition from the new non-state sector that was mostly free from these controls. Based on these distributional considerations alone, we forecast: 1) an immediate and continuing decline in the skills of workers in the state sector as the most able workers leave; 2) higher productivity in the non-state sector, which consists of the most able workers; 3) accounting losses in the state sector, reflecting the transfer of tax revenue to finance payments to the unskilled previously financed within the firm; and 4) restructuring within the state sector to reduce the distortions to relative wage rates. These phenomena are broadly observed across all transition economies.

Libecap, Gary D.
PD April 1997. TI The Great Depression and the Regulating State: Federal Government Regulation of Agriculture: 1884-1970. AA University of Arizona and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5986; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 69. PR $5.00. JE N42, N52. KW Development. American Economy.
AB The New Deal increased the amount and breadth of agricultural regulation in the economy, shifting it from providing public goods and transfers to controlling supplies and directing government purchases to raise prices, and created the institutional structure to continue the new regulation long after the crisis ended. Agricultural laws passed by Congress and the President from 1884 through 1970 are classified as to whether they provided public goods, gave direct and indirect transfers, or engaged in economic regulation. Additionally, laws enacted from 1940 through 1970 are classified as to whether or not they

were linked to specific New Deal agricultural programs. The hypothesis is tested that absent the Great Depression and New Deal, the pattern of agricultural regulation with public goods and transfers that existed prior to 1933 would have continued through 1970. Budget appropriations for economic regulation of agricultural commodities are assembled and categorized as demand enhancement and supply control to analyze how the New Deal affected regulatory expenditures relative to what existed prior to 1933. Additionally, staffing and budgets for the U.S. Department of Agriculture and domestic wheat prices are examined to determine if they were changed by New Deal policies from 1933 through 1970 compared to the pre-New Deal period.

Lipman, Barton L.
PD July 1997. TI Switching Costs in Frequently Repeated Games. AU Lipman, Barton L.; Wang, Ruqu. AA Lipman: University of Western Ontario. Wang: Queens University and Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1190; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 27. PR $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. JE C72, C73. KW Switching Costs. Repeated Games. Coordination Games. Prisoner's Dilemma.
AB The authors show that the standard results for finitely repeated games do not survive the combination of two simple variations on the usual model. In particular, the authors add a small cost of changing actions and consider the effect of increasing the frequency of repetitions within a fixed period of time. They show that this can yield multiple subgame perfect equilibria in games like the Prisoners' Dilemma which normally have a unique equilibrium. Also, it can yield uniqueness in games which normally have multiple equilibria. For example, in a two by two coordination game, if the Pareto dominant and risk dominant outcomes coincide, the unique subgame perfect equilibrium for small switching costs and frequent repetition is to repeat this outcome every period. Also, in a generic Battle of the Sexes game, there is a unique subgame perfect equilibrium for small switching costs.

TI A Unique Subjective State Space for Unforeseen Contingencies. AU Dekel, Eddie; Lipman, Barton L.; Rustichini, Aldo.

Lipsey, Robert E.
TI World Trade Flows, 1970-1992, with Production and Tariff Data. AU Feenstra, Robert C.; Lipsey, Robert E.; Bowen, Harry P.

Lizardo, Mercedes M.
TI The Evolution of Advanced Large Scale Information Infrastructure in the United States. AU Greenstein, Shane M.; Lizardo, Mercedes M.; Spiller, Pablo T.

Ljungqvist, Alexander
TI Hostile Stakes and the Role of Banks in German Corporate Governance. AU Jenkinson, Tim; Ljungqvist, Alexander.

Loretan, Mico
TI Pitfalls in Tests for Changes in Correlations.
AU Boyer, Brian H.; Gibson, Michael S.; Loretan, Mico.

Loungani, Prakash
TI Was China the First Domino? Assessing Links Between China and the Rest of Emerging Asia. AU Fernald, John; Edison, Hali J.; Loungani, Prakash.

Louviere, Jordan J.
TI Variations in Consumer Choice Consistency: The Case of Attribute-Level Driven Shifts in Consistency. AU Dellaert, Benedict G. C.; Brazell, Jeff D.; Louviere, Jordan J.

TI Consumer Choice of Modularized Products: A Conjoint Choice Experiment Approach. AU Dellaert, Benedict G. C.; Borgers, Aloys W. J.; Louviere, Jordan J.; Timmermans, Harry J. P.

TI Consumer Choice of Modularized Products: A Conjoint Choice Experiment Approach. AU Dellaert, Benedict G. C.; Borgers, Aloys W. J.; Louviere, Jordan J.; Timmermans, Harry J. P.

Luangaram, Pongsak
TI Asset Bubbles, Domino Effects and "Lifeboats": Elements of the East Asian Crisis. AU Edison, Hali J.; Luangaram, Pongsak; Miller, Marcus.

Ludema, Rodney D.
TI Regional Integration, Trade, and Migration: Are Demand Linkages Relevant in Europe? AU Wooton, Ian; Ludema, Rodney D.

Lumsdaine, Robin L.
PD April 1997. TI Identifying the Common Component in International Economic Fluctuations. AU Lumsdaine, Robin L.; Prasad, Eswar S. AA Lumsdaine: Princeton University and National Bureau of Economic Research. Prasad: International Monetary Fund. SR National Bureau of Economic Research Working Paper: 5984; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 28. PR $5.00. JE C51, E32, E37. KW Economic Fluctuations. Growth. International Finance. Macroeconomics.
AB In this paper, we develop an aggregation procedure using time-varying weights for constructing the common component in international economic fluctuations. The methodology for deriving time-varying weights is based on some stylized features of the data documented in the paper. The model allows for a unified treatment of cyclical and seasonal fluctuations and also captures the dynamic propagation of shocks across countries. Based on correlation's of individual country fluctuations with the common component, we find evidence for a "world business cycle" as well as evidence for a distinct European common component. We find few systematic differences in international business cycle relationships between the Bretton Woods and post-Bretton Woods periods.

Lyons, Richard K.
TI Is There Private Information in the FX Market? The Tokyo Experiment. AU Ito, Takatoshi; Lyons, Richard K.; Melvin, Michael T.

Machin, Stephen
TI Child Development and Success or Failure in the Youth Labour Market. AU Gregg, Paul; Machin, Stephen.

PD July 1998. TI The Causes and Consequences of Long-Term Unemployment in Europe. AU Machin, Stephen; Manning, Alan. AA Machin: University College London and Centre for Economic Performance. Manning: Department of Economics and Centre for Economic Performance. SR London School of Economics, Centre for Economic Performance Discussion Paper: 400; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 56. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE J23, J63, J64. KW Unemployment. Europe. Labor Markets.
AB One of the most striking features of European labor markets is the high incidence of long-term unemployment. This paper reviews the literature on its causes and consequences. The main conclusions are that: the rise in the incidence of long-term unemployment has been "caused" by a collapse of outflow rates at all duration's of unemployment. While the long-term unemployed do leave unemployment at a slower rate than the short-term unemployed, this has always been the case and their relative outflow rate has not fallen over time. There is no evidence that, for a given level of unemployment, the incidence of long-term unemployment has been ratcheting up over time. Once one controls for heterogeneity of the unemployed, there is little evidence of outflow rates that decline over a spell of unemployment.

Maggi, Giovanni
TI Protection for Sale: An Empirical Investigation. AU Goldberg, Pinelopi Koujianou; Maggi, Giovanni.

Manacorda, Marco
PD September 1998. TI Regional Imbalances and Aggregate Performance in a Leading Sector Model of the Labour Market: An Analysis on Italian Data 1977-1991. AU Manacorda, Marco; Petrongolo, Barbara. AA Centre for Economic Performance and London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 402; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 26. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE J23, J31, J64. KW Sectoral Imbalances. Wage Curve. Unemployment. Labor Markets. Italy.
AB This paper presents a model in which wages throughout the economy depend only on the labor market conditions in some low-unemployment sector. In equilibrium, a labor demand shift towards the primary sector tends to raise the unemployment rate everywhere else in the economy and leaves wages unchanged. Overall this implies an increase in aggregate unemployment. Based on SHIW micro data for the period 1977-1991 the authors find that wages in Italy depend only on the tightness of the labor market in the North. The authors estimate that around 15% of the increase in aggregate unemployment in Italy can be explained by a shift in labor demand in favor of the North not matched by an equal shift in labor supply.

www.nber.org. **PG** not available. **PR** $5.00. **JE** J22, J31, J61, N31. **KW** Economic History. American Economy. Wages. Gold Rush. Labor Markets.

AB The California Gold Rush was an unexpected shock of tremendous size that prompted the costly re-allocation of labor to a frontier region. Using newly-collected archival data, this paper presents estimates of nominal and real wages in Gold Rush California. Consistent with a simple dynamic model of labor market adjustment, real wages rose sharply during the early years of the Rush (1848-1852), declined abruptly following massive in-migration, and then remained constant for the remainder of the 1850's. However, although the Rush itself was a transitory event, it left California wages permanently higher. Estimates based on census data suggest that the supply of labor into Gold Rush California was about half as elastic as the supply of labor into Alaska during the Pipeline Era.

Mariger, Randall P.

PD June 1997. **TI** Social Security Privatization: What it Can and Cannot Accomplish. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/32; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. **PG** 37. **PR** no charge. **JE** E21, H21, H55, L33. **KW** Social Security. Privatization. Taxation.

AB This paper assesses the effect of social security privatization on the government budget, economic efficiency, national saving, and the distribution of resources across generations. It is shown that the benefits of privatization most often touted by privatization advocates can be achieved by simply altering taxes and social security pensions, and leaving the basic structure of social security unchanged. In the conclusion, two simple arguments are given for why privatization might be a good idea nonetheless.

Marin, Dalia

PD June 1997. **TI** The Economic Institution of International Barter. **AU** Marin, Dalia; Schnitzer, Monika. **AA** Marin: Humboldt Universitat zu Berlin. Schnitzer: University of Munich. **SR** Centre for Economic Policy Research, Discussion Paper: 1658; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 44. **PR** 5 pounds or $10.00. **JE** F13, F34, L14. **KW** Economic Incentives. International Trade. Sovereign Debt. Commodity Money. Creditworthiness.

AB Starting with the international debt crisis in the early 1980s, the volume of international barter trade increased substantially. This paper examines how barter can help highly indebted countries to finance imports if they cannot use standard credit arrangements. We argue that payment in goods is easier to enforce than payment in money. But there is also a risk that the debtor pays with inferior quality products. We rank goods with respect to these incentive properties and derive the economic institution of commodity money which explains the trade pattern in barter. The predictions of our model are consistent with data on actual barter contracts.

Marquez, Jaime

TI U.S. Monetary Policy and Econometric Modeling: Tales From the FOMC Transcripts 1984-1991. **AU** Edison, Hali J.;

Marquez, Jaime.

TI Trade Elasticities for G-7 Countries. **AU** Hooper, Peter; Johnson, Karen; Marquez, Jaime.

Marx, Leslie M.

PD June 1997. **TI** Dynamic Voluntary Contribution to a Public Project. **AU** Marx, Leslie M.; Matthews, Steven A. **AA** Marx: University of Rochester. Matthews: Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1188; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 47. **PR** $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C73, H41. **KW** Dynamic Games. Public Goods. Private Provision. Voluntary Contribution. Free Riding.

AB The authors consider the dynamic private provision of funds to a project that generates a flow of public benefits. Examples include fund drives for public television or university buildings. The games studied have complete information about payoffs, allow each player to contribute each period, and let each player observe only the aggregate of the other players' past contributions. The symmetric Nash equilibrium outcomes are characterized and shown to be also perfect. If the number of periods in which contributions are accepted is large enough, and the players are patient or the period length is short enough, equilibria exist in which the project is completed. Some equilibria with these features are Markov perfect. In some, the time to completion shrinks to zero with the period length -- free riding vanishes in the limit. These results are in contrast to those of other models in which allowing repetitive contributions worsens free riding.

Matsuyama, Kiminori

PD March 1997. **TI** Complementarity, Instability, and Multiplicity. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1183; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 36. **PR** $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** B41, E32, O10. **KW** Economic Methodology. Business Fluctuations. Economic Development. Technological Change. Growth.

AB A multiplicity of equilibria, steady states, cycles, etc., are prominent features of models with complementarities. Multiplicity suggests the instability of an economic system and the sensitive dependence of the equilibrium behavior on the environment. In this lecture, the author discusses some methodological questions concerning the economics of complementarity, with special emphasis on instability and multiplicity. A series of monopolistic competition models are developed to illustrate the argument.

Matthews, Steven A.

TI Dynamic Voluntary Contribution to a Public Project. **AU** Marx, Leslie M.; Matthews, Steven A.

Matutes, Carmen

TI Bank Solvency, Market Structure, and Monitoring Incentives. AU Caminal, Ramon; Matutes, Carmen.

TI Can Competition in the Credit Market be Excessive? AU Caminal, Ramon; Matutes, Carmen.

McCallum, Bennett T.

PD April 1998. TI Solutions to Linear Rational Expectations Models: A Compact Exposition. AA Carnegie Mellon University and National Bureau of Economic Research. SR National Bureau of Economic Research Technical Paper: 232; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE C32, C63, E17. KW Rational Expectations. Undetermined Coefficients. Simulation. Time Series. Computational Techniques.
AB An elementary exposition is presented of a convenient and practical solution procedure for a broad class of linear rational expectations models. The undetermined-coefficient approach utilized keeps the mathematics very simple and permits consideration of alternative solution criteria.

McCracken, Michael W.

TI Regression-Based Tests of Predictive Ability. AU West, Kenneth D.; McCracken, Michael W.

McIntosh, Steven

PD May 1998. TI The Demand for Post-Compulsory Education in Four European Countries. AA Centre for Economic Performance and London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 393; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 34. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE I21, J23, J24, J31. KW Participation. Higher Education. Cointegration. Employment.
AB This study seeks to explain changes in the proportion of 16, 17 and 18 year olds who decide to participate in post-compulsory education. Four countries, Germany, the Netherlands, Sweden, and England, are considered over the period from 1960 to the present day. An initial inspection of the data reveals non-stationarity in virtually all of the series under consideration, so that a cointegration framework is appropriate. The results suggest that the key variable that explains the growth in post-compulsory education participation is the increase in prior academic attainment before the end of compulsory schooling. This is the case particularly for females, males being also influenced by the returns available to offering a higher level of education, and the level of real income available to "spend" on education. The level of youth unemployment seems to play only a small part in the decision as to whether to remain in education.

TI If You're Happy and You Know It... Job Satisfaction in the Low Wage Service Sector. AU Brown, Donna; McIntosh, Steven.

McKibbin, Warwick J.

TI Reducing Coal Subsidies and Trade Barriers: Their Contribution to Greenhouse Gas Abatement. AU Anderson, Kym; McKibbin, Warwick J.

McLaren, John

PD July 1996. TI Corruption, Black Markets, and the Fiscal Problem in LDC's: Some Recent Findings. AA Columbia University. SR Yale Economic Growth Center Discussion Paper: 763; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 45. PR $2.00 plus postage. JE H26, O17, O23. KW Tax Evasion. Corruption. Fiscal Problems.
AB The fiscal difficulties of LDC's, and the important role for evasion as a part of them, are well-known. Drawing on the rich literature on tax evasion in the public finance literature, much recent research has shed light on two phenomena contributing to this problem: Fiscal corruption and evasion through illegal transactions. This note surveys some of this recent research.

PD October 1996. TI Supplier Relations and the Market Context: A Theory of Handshakes. AA Columbia University. SR Yale Economic Growth Center Discussion Paper: 766; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 34. PR $2.00 plus postage. JE L11, L14, L15, L22. KW Subcontracting. Cooperative Innovation. Industrial Procurement. Cooperation. Japan.
AB This paper provides an economic theory of the degree of formality in industrial procurement. The argument is based on a tension between two procurement goals: imposing cost discipline on the supplier, and creating the conditions for cooperative innovation. In this model, a contract tends to solve the cost discipline problem but eliminates cooperation; non-contractual procurement in a vertically integrated industry provides cooperation but not cost discipline; but non-contractual procurement in a non-integrated industry solves both problems at once. Essentially, a thick market for inputs reduces the need for a contract, since the promise of finding an alternative potential buyer as a bargaining threat enhances the supplier's incentive to produce a high quality input. Thus, in highly integrated markets, contacts are used, while in less integrated industries business is done on handshakes. This theory of the role of market context roughly fits some stylized facts and international comparisons.

Melitz, Jacques

PD May 1997. TI Some Cross-Country Evidence About Debt, Deficits and the Behaviour of Monetary and Fiscal Authorities. AA CREST-INSEE. SR Centre for Economic Policy Research, Discussion Paper: 1653; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 27. PR 5 pounds or $10.00. JE E60, E63. KW Monetary Policy. Fiscal Policy. Policy Coordination. Public Debt.
AB This paper assesses how monetary authorities behave and how they interact. Pooled data for the 15 members of the European Union except Luxembourg and five other OECD countries serve to answer these questions. Three basic conclusions emerge. First, fiscal policy responds to the ratio of public debt to output in a stabilizing manner. Second, coordinated macroeconomic policy exists: easy fiscal policy leads to tight monetary policy, and easy monetary policy to tight fiscal policy. Third, both monetary and fiscal policy respond to the cycle in a stabilizing manner, but automatic stabilization through fiscal policy is much weaker than

generally perceived. Expansion raises tax receipts but also government expenditures. The destabilizing response on the expenditure side is also extremely marked.

Meltzer, David

PD February 1997. **TI** Accounting for Future Costs in Medical Cost-Effectiveness Analysis. **AA** University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5946; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 40. **PR** $5.00. **JE** D61, I18. **KW** Health Care. Productivity.

AB Most medical cost-effectiveness analyses include future costs only for related illnesses but this approach is controversial. This paper demonstrates that cost-effectiveness analysis is consistent with lifetime utility maximization only if it includes all future medical and non-medical expenditures. Estimates of the magnitude of these future costs suggest that they may substantially alter both the absolute and relative cost-effectiveness of medical interventions, particularly when an intervention increases length of life more than quality of life. In older populations, current methods overstate the cost-effectiveness of interventions which extend life compared to interventions which improve the quality of life.

Melvin, Michael T.

TI Is There Private Information in the FX Market? The Tokyo Experiment. **AU** Ito, Takatoshi; Lyons, Richard K.; Melvin, Michael T.

Mendoza, Enrique G.

PD August 1998. **TI** The Business Cycles of Currency Speculation: A Revision of the Mundellian Framework. **AU** Mendoza, Enrique G.; Uribe, Martin. **AA** Mendoza: Duke University. Uribe: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 617; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 44. **PR** no charge. **JE** E32, F31, F32, F41. **KW** Currency Crises. Balance of Payments. Business Cycles.

AB In his seminal 1960 study on the dynamics of alternative exchange rate regimes, Robert Mundell proposed a theory of balance-of-payments crises in which speculators base their actions on the observed holdings of central bank foreign reserves. The authors examine the quantitative implications of this view from the perspective of an equilibrium business cycle model in which rational expectations of a devaluation are conditioned on foreign reserves. The model explains some of the empirical regularities of the business cycle associated with temporary fixed-exchange-rate regimes. In turn, these cyclical dynamics validate the agents' expectations by producing devaluation probabilities that resemble those estimated from the data. The model thus aims to explain both the real effects and the collapse of exchange-rate-based stabilizations in a unified framework.

Metcalf, David

TI (Not) Hanging on the Telephone: Payment Systems in the New Sweatshops. **AU** Fernie, Sue; Metcalf, David.

Mikkola, Anne

TI The Behaviour of the Real Exchange Rate: A Re-Examination Using Finite Sample Approach. **AU** Kuo, Biing-Shen; Mikkola, Anne.

Milesi-Ferretti, Gian Maria

PD June 1997. **TI** Fiscal Rules and the Budget Process. **AA** Milesi-Ferretti: Imperial College. **SR** Centre for Economic Policy Research, Discussion Paper: 1664; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 48. **PR** 5 pounds or $10.00. **JE** E62, H61, H62. **KW** Budget Deficits. Government Spending. Fiscal Rules. Budget Process.

AB This paper examines the rationale for the imposition of fiscal rules as a way to reduce budgetary imbalances. It presents theoretical arguments for the existence of a 'fiscal deficit bias' and the empirical evidence on the economic, political and institutional factors leading to this bias. In the context of these findings, it discusses the potential role of legal constraints on the level of key fiscal variables, and of reforms in budgetary procedures in enhancing fiscal discipline. It also evaluates proposals for budgetary reform in Italy.

PD October 1997. **TI** Determinants of Korean Trade Flows and their Geographical Destination. **AU** Milesi-Ferretti, Gian Maria; Giorgianni, Lorenzo. **AA** Milesi-Ferretti: Imperial College. Giorgianni: International Monetary Fund. **SR** Centre for Economic Policy Research, Discussion Paper: 1703; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 56. **PR** 5 pounds or $10.00. **JE** F11, F14, F31, F32. **KW** Korea. Exports. Imports. Trade Elasticities.

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

Miller, Marcus

PD November 1997. **TI** Shareholders and Stakeholders: Human Capital and Industry Equilibrium. **AU** Miller, Marcus; Zhang, Lei; Ippolito, Roberto. **AA** Miller and Zhang: University of Warwick. Ippolito: LUISS-Guido Carli. **SR** Centre for Economic Policy Research, Discussion Paper: 1719; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 32. **PR** 5 pounds or $10.00. **JE** D41, J24. **KW** Industry-Specific Skill. Credit Constraint. Irreversible Investment. Stakeholder. Industry Equilibrium.

AB Producing high technology output and supplying sophisticated services often involves costly investment in industry-specific skills. But the threat of poaching means that it is the individual 'stakeholder', not the firm, who must bear the cost. We investigate various mechanisms for funding human capital investment in an industry equilibrium framework where capital market imperfections would (in the absence of intervention) result in underinvestment. The main result is that government provision of loan guarantees (conditional on no-

bankruptcy) leads to wage hikes which (by forcing exit of some firms thus increasing monopoly power) raise profits in a socially inefficient manner: income contingent loans and levy subsidy schemes, meanwhile, can result in a socially efficient outcome.

TI   Asset Bubbles, Domino Effects and "Lifeboats": Elements of the East Asian Crisis. AU   Edison, Hali J.; Luangaram, Pongsak; Miller, Marcus.

Minford, Patrick
PD   August 1997. TI   Nominal Contracts as Behaviour Towards Risk. AU   Minford, Patrick; Nowell, Eric. AA   University of Liverpool. SR   Centre for Economic Policy Research, Discussion Paper: 1666; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG   64. PR   5 pounds or $10.00. JE   O20, O23. KW   Nominal Contracts. Indexing Diversification. Stochastic Simulation. General Equilibrium.
AB   We look for a theoretical justification of nominal wage contracts in household diversification of risk. We assume it is more costly for households than for firms to use financial markets for this purpose. In a calibrated general equilibrium model we find from stochastic simulation that where nominal shocks have comparable variability to real shocks optimal wage contracts are overwhelmingly nominal, in accordance with general OECD experience.

Mingo, John J.
TI   Premiums in Private Versus Public Bank Branch Sales. AU   Berkovec, James A.; Mingo, John J.; Zhang, Xuechun.

Miron, Jeffrey A.
PD   March 1997. TI   The Genesis and Evolution of Social Security. AU   Miron, Jeffrey A.; Weil, David, N. AA   Miron: Boston University and National Bureau of Economic Research. Weil: Brown University and National Bureau of Economic Research. SR   National Bureau of Economic Research Working Paper: 5949; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG   34. PR $5.00. JE   H55, N42. KW   Development of the American Economy. Public Economics.
AB   We examine the creation of Social Security during the Great Depression, and how it has evolved since, asking in particular to what extent the program as it exists today is the same as that created in 1935 and 1939. We find that there has been surprising continuity. Much of the program's growth was built in from its inception. The replacement rate and the ratio of benefits to payrolls are today roughly at the levels designed into the original legislation. Payroll tax rates today are higher than had been planned, in part because of the failure to accumulate a trust fund during the program's early years. The change in the ratio of contributors to beneficiaries which has taken place over the last 60 years was fully anticipated. The most dramatic changes in Social Security's functioning have come not from legislation, but from changes in the environment in which the program operates. Before the Depression, retirement was unlikely and often involuntary. Higher life expectancy, lower labor force participation, and better health have undermined Social Security's original purpose, which was as a form of insurance. We also find that the Depression itself had surprisingly little influence on the design chosen for Social

Security.

Mitchell, Mark L.
TI   A Clinical Exploration of Value Creation and Destruction in Acquisitions: Organizational Design, Incentives, and Internal Capital Markets. AU   Kaplan, Steven N.; Mitchell, Mark L.; Wruck, Karen H.

Mitchell, Olivia S.
TI   Pension and Social Security Wealth in the Health and Retirement Study. AU   Gustman, Alan L.; Mitchell, Olivia S.; Samwick, Andrew A.; Steinmeier, Thomas L.

PD   April 1997. TI   New Evidence on the Money's Worth of Individual Annuities. AU   Mitchell, Olivia S.; Poterba, James M.; Warshawsky, Mark J. AA   Mitchell: University of Pennsylvania and National Bureau of Economic Research. Poterba: Massachusetts Institute of Technology and National Bureau of Economic Research. Warshawsky: TIAA-CREF. SR   National Bureau of Economic Research Working Paper: 6002; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG   42. PR $5.00. JE   D91, G22, H55, J14. KW   Aging. Asset Pricing. Public Economics.
AB   This paper presents new information on the expected present discounted value of payouts on individual life annuities. The annuity we examine is the single premium immediate life annuity, an insurance product that pays out a nominal level sum as long as the covered person lives, in exchange for an initial lump-sum premium. This annuity offers protection against the risk of someone outliving his saving, given uncertainty about longevity. For reasonable estimates of behavioral parameters, we calculate that individual annuities are currently priced so that retirees without bequest motives should find these policies of substantial value in configuring their portfolios to smooth retirement consumption. We also find that the expected present discounted value of payouts, relative to the initial cost of the annuity, has increased over the last decade. These findings bear on the policy debate regarding the role of individual choice and self-reliance in retirement planning.

Mizon Grayham E.
TI   Exogeneity, Cointegration, and Economic Policy Analysis. AU   Ericsson, Neil R.; Hendry, David F.; Mizon Grayham E.

Moffitt, Robert
TI   An Analysis of Sample Attrition in Panel Data: The Michigan Panel Study of Income Dynamics. AU   Fitzgerald, John; Gottschalk, Peter; Moffitt, Robert.

Molina, E.
TI   Core Representations of the Standard Fixed Tree Game. AU   Koster, Maurice; Molina, E.; Sprumont, Y.; Tijs, S.

Moore, John
TI   Default and Renegotiation: A Dynamic Model of Debt. AU   Hart, Oliver; Moore, John.

Moors, J. J. A.
PD   December 1997. TI   A Critical Evaluation of Mangat's Two-Step Procedure in Randomized Response.

AA   CenlER and Tilburg University.   SR   Tilburg CenlER for Economic Research Discussion Paper: 97112; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm.   PG   11.   PR   no charge.   JE   C13, C42.   KW   Privacy Protection. Randomized Response. Sample Surveys. Variance Comparisons.

AB   Randomized response is a collection of interviewing techniques designed to enlarge respondents' cooperativeness and sincerity by a full protection of their privacy. Mangat et al (1990, 1993) proposed a two-step procedure: interviewees are either asked a direct question or subjected to a randomized response technique. It is shown here that Mangat's procedure -- although physically different -- is mathematically identical to previous randomized response methods. This holds for Warner's original technique as well as for Simmons' Unrelated Question model; in the latter case, the population fraction having the unrelated property may be known or unknown. The optimality properties op Mangat's procedure are an immediate consequence.

PD   December 1997.   TI   Repeated Audit Controls. AU   Moors, J. J. A.; van der Genugten, B. B.; Strijbosch, L. W. G.   AA   CenlER and Tilburg University.   SR   Tilburg CenlER for Economic Research Discussion Paper: 97113; CenlER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands.   Website: cwis.kub.nl/few5/center/center.htm. PG   20.   PR   no charge.   JE   C13, C42, C63, M41. KW   Auditing.   Confidence Limit.   Double   Inspection. Inspection Errors. Quality Control.

AB   An important task of auditors is to check whether recorded values are correct. From the number of the errors found in a sample, upper confidence limits for the fraction (and or total size) of the errors in the population are calculated by standard methods. Even auditors are human, however, and may make mistakes: errors may remain unnoticed and it even may occur that a newly found "error" is in fact a correct value. As administrative rules and regulations are becoming more and more complicated, these two types of auditors' mistakes tend to occur more frequently. Hence, there is an increasing need to check the auditing process itself. This paper investigates the consequences of the (possible) occurrence of errors in the sample that are not detected by the auditor. For this case, a general method is presented to find an exact upper confidence limit for the population fraction of errors.

Morris, Stephen
PD   August 1997.   TI   Unique Equilibrium in a Model of Self-Fulfilling Currency Attacks.   AU   Morris, Stephen; Song Shin, Hyun.   AA   Morris: University of Pennsylvania. Song Shin: Nuffield College, Oxford.   SR   Centre for Economic Policy Research, Discussion Paper: 1687; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk.   PG   32. PR   5 pounds or $10.00.   JE   D82, F31.   KW   Currency Crisis. Common Knowledge.

AB   Even though self-fulfilling currency attacks lead to multiple equilibria when fundamentals are common knowledge, we demonstrate the uniqueness of equilibrium when speculators face a small amount of noise on their signals about the fundamentals. This unique equilibrium depends not only on the fundamentals, but also on financial variables such as the

quantity of hot money in circulation and the costs of speculative trading. In contrast to multiple equilibrium models, our model allows analysis of policy proposals directed at curtailing currency attacks.

TI   Payoff Continuity in Incomplete Information Games. AU   Kajii, Atsushi; Morris, Stephen.

TI   Refinements and Higher Order Beliefs: A Unified Survey.   AU   Kajii, Atsushi; Morris, Stephen.

Mulligan, Casey B.
PD   March 1997.   TI   The Optimum Quantity of Money: Theory and Evidence.   AU   Mulligan, Casey B.; Sala-i-Martin, Xavier X.   AA   Mulligan: University of Chicago. Sala-i-Martin: Columbia University and National Bureau of Economic Research.   SR   National Bureau of Economic Research Working Paper: 5954; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org.   PG   50.   PR $5.00.   JE   E52, E61, E63.   KW   Economic Fluctuations. Growth. Monetary Economics.

AB   In this paper we propose a simple and general model for computing the Ramsey optimal inflation tax, which includes several models from the previous literature as special cases. We show that it cannot be claimed that the Friedman rule is always optimal (or always non-optimal) on theoretical grounds. The Friedman rule is optimal or not, depending on conditions related to the shape of various relevant functions. One contribution of this paper is to relate these conditions to measurable variables such as the interest rate or the consumption elasticity of money demand. We find that it tends to be optimal to tax money when there are economies of scale in the demand for money (the scale elasticity is smaller than one) and/or when money is required for the payment of consumption or wage taxes. We find that it tends to be optimal to tax money more heavily when the interest elasticity of money demand is small. We present empirical evidence on the parameters that determine the optimal inflation tax. Calibrating the model to a variety of empirical studies yields an optimal nominal interest rate of less than 1% per year, although that finding is sensitive to the calibration.

Mullin, Wallace P.
TI   The Sugar Institute Learns to Organize Information Exchange.   AU   Genesove, David; Mullin, Wallace P.

Murnane, Richard J.
PD   April 1997.   TI   Does Acquisition of a GED Lead to More Training, Post-Secondary Education, and Military Service for School Dropouts?   AU   Murnane, Richard J.; Willett, John B.; Boudett, Kathryn Parker.   AA   Harvard University. SR   National Bureau of Economic Research Working Paper: 5992; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org.   PG   31.   PR $5.00.   JE   I21.   KW   Labor Studies.

AB   This paper uses longitudinal data from the National Longitudinal Survey of Youth to examine whether acquisition of a GED increases the probability that male and female school dropouts obtain training, post- secondary education, or military service. Random effects probit models are used to account for both the dichotomous nature of the dependent variables and non-zero correlation's among error terms pertaining to different

years of data for the dame individual. We find that acquisition of a GED increases the probability that school dropouts obtain post-secondary education and the probability that they obtain non-company training, defined as training provided by government or by proprietary schools. However, it is still the case that the majority of GED, recipients obtain no post-secondary education or training through the age of 26.

Murray, Asa
PD July 1998. TI Growing Skills in Europe: the Changing Skills Profiles of France, Germany, the Netherlands, Portugal, Sweden and the UK. AU Murray, Asa; Steedman, Hilary. AA Murray: Stolkholm Institute of Education. Steedman: London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 399; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 27. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE I21, J24. KW Skills. Education. Europe.
AB This paper uses Labor Force and other national survey data to examine stock levels and changes in the stock of skills (educational and vocational qualifications) of the population over the period 1985-1996 for six European countries with particular reference to the low-skilled. National qualifications are classified using the International Standard Classification of Education (ISCED) levels 0-7. All countries have reduced the proportion in the low-skilled group over the period 1985- 1996; however, countries which already had the lowest levels of low skills made the fastest progress. Younger (25-28) populations are better qualified than the working-age populations. Proportions of low-skilled men and women in the working-age population have declined at similar rates in all countries. On the basis of the growth rates of the past ten years, France, the Netherlands, Sweden and Germany appear to be converging on similar skill profiles for the young (25-28) population in 2010.

Mwabu, Germano
TI Labor Unions and the Distribution of Wages and Employment in South Africa. AU Schultz, T. Paul; Mwabu, Germano.

TI Wage Premia for Education and Location, by Gender and Race in South Africa. AU Schultz, T. Paul; Mwabu, Germano.

Myerson, Roger B.
PD June 1997. TI Population Uncertainty and Poisson Games. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1102R; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 28. PR $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. JE C70. KW Game Theory. Poisson Games. Population Uncertainty. Independent Actions.
AB A general class of models is developed for analyzing games with population uncertainty. Within this general class, a special class of Poisson games is defined. It is shown that Poisson games are uniquely characterized by properties of

independent actions and environmental equivalence. The general definition of equilibrium for games with population uncertainty is formulated, and it is shown that the equilibria of Poisson games are invariant under payoff-irrelevant type splitting. An example of a large voting game is discussed, to illustrate the advantages of using a Poisson game model for large games.

PD June 1997. TI Large Poisson Games. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1189; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 41. PR $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. JE C70, D71. KW Game Theory. Poisson Games. Pivot Probabilities. Voting. Binary Elections.
AB Existence of equilibria is proven for Poisson games with compact type sets and finite action sets. Then three theorems are introduced for characterizing limits of probabilities in Poisson games when the expected number of players becomes large. The magnitude theorem characterizes the rate at which probabilities of events go to zero. The offset theorem characterizes the ratios of probabilities of events that differ by a finite additive translation. The hyperplane theorem estimates probabilities of hyperplane events. These theorems are applied to derive formulas for pivot probabilities in binary elections, and to analyze a voting game that was studied by Ledyard.

Neary, J. Peter
TI R&D Spillovers and the Case for Industrial Policy in an Open Economy. AU Leahy, Dermot; Neary, J. Peter.

PD November 1997. TI Pitfalls in the Theory of International Trade Policy: Concertina Reforms of Tariffs and Subsidies to High-Technology Industries. AA University College Dublin. SR Centre for Economic Policy Research, Discussion Paper: 1740; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 29. PR 5 pounds or $10.00. JE F13. KW Trade Liberalization. Tariff Reform. 'Concertina Rule'. Customs Union. Strategic Trade. Industrial Policy.
AB This paper explores the links between international trade theory and the practice of trade and industrial policy in open economies, with special attention to three areas where theoretical lessons have been misunderstood in policy debates. It argues that the 'concertina rule' for tariff reform justifies reductions in high tariffs, but not moves towards uniformity and particularly not increases in low tariffs. It shows that the basic principles of tariff reform are the same in unilateral, multilateral and customs union contexts. Finally, the paper suggests that the theory of strategic trade policy does not justify subsidies to high-technology industries.

Nechyba, Thomas J.
PD March 1997. TI Community Choice and Local Public Services: A Discrete Choice Approach. AU Nechyba, Thomas J.; Strauss, Robert P. AA Nechyba: Stanford University and National Bureau of Economic Research. Strauss: Carnegie Mellon University. SR National Bureau of

Economic Research Working Paper: 5966; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** $5.00. **JE** H73, R20. **KW** Public Economics.
AB This paper uses a discrete choice approach to estimate the impact of local fiscal and other variables on individual community choices. It employs a combination of a unique micro data set composed of ninety percent of all homeowners in six school districts in Camden County, New Jersey and information on local community characteristics including local crime rates, commercial activity and distance from a metropolitan area. The empirical model implies that all these variables as well as the local per pupil spending on public education and "community entry prices" play a major part in explaining the location of individual households. Estimates of elasticities of the probabilities of a representative individual choosing a particular community with respect to the various variables are calculated and discussed.

Neube, Mthuli
TI Heterogeneous Information Arrival and Option Pricing. **AU** Asea, Patrick K.; Neube, Mthuli.

Neumann, George R.
TI Learning in Sender-Receiver Games. **AU** Blume, Andreas; De Jong, Douglas V.; Neumann, George R.; Savin, N. E.

Nevo, Aviv
PD February 1998. **TI** A Research Assistant's Guide to Random Coefficients Discrete Choice Models of Demand. **AA** University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 221; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** $5.00. **JE** D12, L11, L12, L13, O31. **KW** Demand. Discrete Choice. Differentiated Products. Random Coefficients. Industrial Organization.
AB The study of differentiated-products markets is a central part of empirical industrial organization. Questions regarding market power, mergers, innovation, and valuation of new brands are addressed using cutting-edge econometric methods and relying on economic theory. Unfortunately, difficulty of use and computational costs have limited the scope of application of recent developments in one of the main methods for estimating demand for differentiated products: random coefficients discrete choice models. As our understanding of these models of demand has increased, both the difficulty and costs have been greatly reduced. This paper carefully discusses the latest innovations in these methods with the hope of (1) increasing the understanding, and therefore the trust, among researchers who never used these methods, and (2) reducing the difficulty of use, and therefore aiding in realizing the full potential of these methods.

Newman, Andrew F.
TI The Labour Market and Corporate Structure. **AU** Acemoglu, Daron; Newman, Andrew F.

TI Monotone Matching in Perfect and Imperfect Worlds. **AU** Legros, Patrick; Newman, Andrew F.

Nijman, Theo E.
TI Testing for Mean-Variance Spanning with Short Sales Constraints and Transaction Costs: The Case of Emerging Markets. **AU** de Roon, Frans A.; Nijman, Theo E.; Werker, Bas J. M.

Nivet, Jean-Francois
TI Wage and Investment Behaviour in Transition: Evidence from a Polish Panel Data Set. **AU** Grosfeld, Irena; Nivet, Jean-Francois.

Nolan, Brian
TI The Earnings Distribution and Returns to Education in Ireland, 1987- 94. **AU** Barrett, Alan; Callan, Tim; Nolan, Brian.

Nowell, Eric
TI Nominal Contracts as Behaviour Towards Risk. **AU** Minford, Patrick; Nowell, Eric.

O'Donoghue, Ted
PD February 1997. **TI** Incentives for Procrastinators. **AU** O'Donoghue, Ted; Rabin, Matthew. **AA** O'Donoghue: Northwestern University. Rabin: University of California, Berkeley. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1181; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 34. **PR** $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** A12, B49, C70, D60, D82. **KW** Deadlines. Incentive Schemes. Procrastination. Principal-Agent.
AB The propensity to procrastinate reflects a time inconsistency: People often put off unpleasant tasks in a way unappreciated by their long-run selves. This paper examines the implications of procrastination for the design of temporal incentive schemes, where an agent is rewarded according to when he completes some task. Delay in completion of the task is costly to the principal, but the agent faces a stochastic cost of completing the task, so that it is efficient to wait when the task cost is high. When the principal knows the distribution of task costs, she can always design a stationary incentive scheme that achieves first- best efficiency. However, while for time-consistent agents this scheme will reflect the true delay cost, for procrastinators this scheme must punish delay more severely to counteract procrastination. Furthermore, second-best optimal incentive schemes will typically not be a stationary scheme, but rather a sort of generalized deadline contract.

PD March 1997. **TI** A Patentability Requirement for Sequential Innovation. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1185; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 34. **PR** $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** O31, O32, O34. **KW** Innovation. Research and Development. Patents.

AB This paper investigates patent protection when there is a long sequence of innovations and firms repeatedly supersede each other. There can be insufficient incentives for R&D if successful firms earn market profit only until competitors achieve something better. To solve this problem, patents must provide protection against future innovators. This paper proposes using a patentability requirement -- a minimum innovation size required to get a patent -- to serve this purpose. The author shows that a patentability requirement can stimulate R&D investment and increase dynamic efficiency. Intuitively, requiring firms to pursue larger innovations can prolong market incumbency because larger innovations are harder to achieve. Longer market incumbency then implies an increased reward to innovation, stimulating R&D investment.

O'Rourke, Kevin H.

AB Trade theorists have come to understand that their theory is ambiguous on the question: are trade and factor flows substitutes? While this sounds like an open invitation for empirical research, hardly any serious econometric work has appeared in the literature. This paper uses history to fill the gap. It treats the experience of the Atlantic economy between 1870 and 1940 as panel data with almost 700 observations. When shorter run business cycles and 'long swings' are extracted from the panel data, substitutability is soundly rejected. When secular relationships are extracted over longer time periods and across trading partners, once again substitutability is soundly rejected. Finally, the paper explores immigration policy and finds that policy-makers never behaved as if they viewed trade and immigration as substitutes.

AB The paper estimates the correlation between tariffs and economic growth in the late nineteenth century, in the context of three types of growth equation: unconditional convergence equations; conditional convergence equations; and factor accumulation models. It does so for a panel of ten countries between 1875 and 1914. Tariffs were positively correlated with growth in these countries during this period.

Obstfeld, Maurice

AB This paper surveys the evolution of international capital mobility since the late nineteenth century. We begin with an overview of empirical evidence on the fall and rise of integration in the global capital market. A discussion of institutional developments focuses on the use of capital controls and the pursuit of domestic macroeconomic policy objectives in the context of changing monetary regimes. A fundamental macroeconomic policy trilemma has forced policymakers to trade off among conflicting goals. The natural implication of the trilemma is that capital mobility has prevailed and expanded under circumstances of widespread political support either for an exchange- rate subordinated monetary policy regime (e.g., the gold standard), or for a monetary regime geared mainly toward domestic objectives at the expense of exchange-rate stability (e.g., the recent float). Through its effect on popular attitudes toward both the gold standard and the legitimate scope for government macroeconomic intervention, the Great Depression emerges as the key turning point in the recent history of international capital markets.

AB We propose that analysis of purchasing power parity (PPP) and the law of one price (LOOP) should explicitly take into account the possibility of 'commodity points' - thresholds delineating a region of no central tendency among relative prices, possibly due to lack of perfect arbitrage in the presence of transaction costs and uncertainty. More than 80 years ago, Heckscher stressed the importance of such incomplete arbitrage in the empirical application of PPP. We devise an econometric method to identify commodity points. Price adjustment is treated as a non-linear process, and a threshold autoregression (TAR) offers a parsimonious specification within which both thresholds and adjustment speeds are estimated by maximum likelihood methods. Our model performs well using post-1980 data, and yields parameter estimates that appear quite reasonable. Adjustment outside the thresholds might imply half- lives of price deviations measured in months rather than years, and the thresholds correspond to popular rough estimates of the order of magnitude of actual transport costs. The estimated commodity points appear to be positively related to objective measures of market segmentation, notably nominal exchange rate volatility.

AB This paper analyses the constraints European Union law places on the 1 January 1999 choices of irrevocably fixed conversion rates between the euro and the currencies of EMU members states. Current EU legislation, notably the Maastricht Treaty, requires that the bilateral currency conversion factors implied by the 1 January 1999 choices equal closing market exchange rates on 31 December 1998. Given that legal constraint, there still exist several strategies for choosing the relative prices of EMU member currencies against the euro. Unfortunately, most of these have potentially damaging side effects. One approach, based on official Stage 2 offers of contingent euro forward contracts with value dates at the start of Stage 3, allows a highly credible preannouncement of the bilateral currency conversion factors to be set at the start of EMU. That approach assumes, however, that no prospective EMU members can withdraw between their selection in May 1998 and the start of Stage 3.

Ohanian, Lee E.

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

Oosterbeek, Hessel

TI Explaining International Differences in Male Wage Inequality by Differences in Demand and Supply of Skill. AU Leuven, Edwin; Oosterbeek, Hessel; van Ophem, Hans.

Orphanides, Athanasios

PD June 1997. TI A Quantitative Exploration of the Opportunistic Approach to Disinflation. AU Orphanides, Athanasios; Small, David H.; Wieland, Volker; Wilcox, David W. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series: 1997/36; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 30. PR no charge. JE E31, E52. KW Inflation. Monetary Policy. Interest Rates. Policy Rules.
AB A number of observers have advocated recently that the Federal Reserve take an "opportunistic" approach to the conduct of monetary policy. A hallmark of this approach is that the central bank focuses on fighting inflation when inflation is high, but focuses on stabilizing output when inflation is low. The implied policy rule is nonlinear. This paper compares the behavior of inflation and output under opportunistic and conventional linear policies. Using stochastic simulations of a small-scale rational expectations model, the authors study the cost and time required to achieve a given disinflation, as well as the steady-state distributions of inflation and output under the various rules.

Orszag, J. Michael

PD July 1997. TI Expanding the Welfare System: A Proposal for Reform. AU Orszag, J. Michael; Snower, Dennis J. AA Birkbeck College, London. SR Centre for Economic Policy Research, Discussion Paper: 1674; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 32. PR 5 pounds or $10.00. JE E60, H11, H20, H40, H50, I11, I20, J68. KW Welfare State. Redistribution. Social Insurance. Unemployment. Health.

Education. Training.
AB This proposal involves the establishment of 'welfare accounts' for every person in a country. There are four accounts: a retirement account (covering pensions), an unemployment account (covering unemployment support), a human capital account (covering education and training), and a health account. Unlike current welfare state systems - where welfare services are financed predominantly out of general taxes - people would make ongoing, mandatory contributions to each of these welfare accounts. The balances in these accounts would cover people's major welfare needs, with the government setting mandatory minimum contribution rates and maximum withdrawal rates. The government would operate within two budgetary systems: one in which non-welfare expenditures are financed through the existing array of taxes; and another in which public-sector expenditures on welfare services are financed through payments from people's welfare accounts. The government could redistribute income across people's welfare accounts, but these redistribution's would be constrained to those of the balanced-budget variety: total (economy- wide) taxes on each of the welfare accounts would be equal to total transfers into each of accounts. The public and private sectors would provide welfare services on an equal footing, setting prices for these services and competing with one another for the custom of the welfare account holders.

PD July 1997. TI Youth Unemployment and Government Policy. AU Orszag, J. Michael; Snower, Dennis J. AA Birkbeck College, London. SR Centre for Economic Policy Research, Discussion Paper: 1675; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 24. PR 5 pounds or $10.00. JE J23, J24, J31, J32, J64. KW Unemployment Benefits. Adult Unemployment. Employment Policy. Youth Unemployment.
AB This paper discusses how employment vouchers should depend on age in a simple overlapping generations model in which workers are either young or old. We find that young workers should receive higher vouchers as displacement of the old rises and as the deadweight loss from providing vouchers to the old increases. We provide a simple characterization of the difference between youth and old vouchers in the context of our model.

Ortalo-Magne, Francois

PD June 1998. TI Housing Market Fluctuations in a Life-Cycle Economy with Credit Constraints. AU Ortalo-Magne, Francois; Rady, Sven. AA Ortalo-Magne: London School of Economics and Centre for Economic Policy. Rady: Stanford University. SR Stanford Graduate School of Business Research Paper: 1501; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. PG 36. PR no charge. JE D11, D91, E32, L85. KW Housing Market. Fluctuations. Life Cycle Models.
AB This paper presents a first step towards a new theory of housing market fluctuations. The authors develop a life-cycle model where agents face credit constraints and their housing consumption is restricted to a discrete set of possibilities. The market interaction of young credit constrained agents climbing the property ladder with old agents trading down, generates co-movements of aggregate house prices, volume of transactions and income, consistent with the patterns observed in the U.S. and the U.K. The model reproduces the slight lead of transaction volume over the other two series as documented

in the data. The authors' theory asserts that the fluctuations in housing prices depend crucially on fluctuations in the current income of young households. Thus, it sheds light on why housing prices are more volatile than GDP, and why they exhibit some degree of predictability in a market where households optimize over the timing of their transactions.

TI Technological Innovations: Slumps and Booms.
AU Felli, Leonardo; Ortalo-Magne, Francois.

Ottaviano, Gianmarco I. P.
PD October 1997. TI Agglomeration in the Global Economy: A Survey of the 'New Economic Geography'. AU Ottaviano, Gianmarco I. P.; Puga, Diego. AA Ottaviano: Universita di Bologna. Puga: London School of Economics. SR Centre for Economic Policy Research, Discussion Paper: 1699; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 48. PR 5 pounds or $10.00. JE F12, F15, R12. KW Economic Geography. Location. Agglomeration. Integration. Migration. Linkages.
AB This review of recent contributions reveals common conclusions about the effects of integration on location. For high trade costs the need to supply markets locally encourages firms to spread across different regions. Integration weakens the incentives for self-sufficiency and for intermediate values of trade costs pecuniary externalities induce firms and workers to cluster together, turning location into a self- reinforcing process. Agglomeration raises the price of immobile local factors and goods, however, so for low transport costs, firms may spread to regions where those prices are lower.

Owen, Ann L.
TI Risk, Entrepreneurship and Human Capital Accumulation. AU Iyigun, Murat F.; Owen, Ann L.

Ozkan, F. Gulcin
PD November 1997. TI Monetary Union, Entry Conditions and Economic Reform. AU Ozkan, F. Gulcin; Sutherland, Alan; Sibert, Anne C. AA Ozkan: Brunel University. Sutherland: University of York. Sibert: Birkbeck College. SR Centre for Economic Policy Research, Discussion Paper: 1720; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 24. PR 5 pounds or $10.00. JE F33, F36. KW Monetary Union. Convergence. Entry conditions.
AB This paper models the behavior of a potential entrant into a monetary union where there is an inflation entry condition. In addition to making a monetary policy decision during a qualifying period, the potential entrant must make a decision about structural reform. The paper shows that the entry condition can have two undesirable effects. First, it can lead to multiple equilibria because inflationary expectations acquire a self-fulfilling property. Second, the entry condition can lead to a reduction in the amount of reform. This is because the entry condition reduces inflationary expectations and thus reduces the incentive to reform.

Ozler, Sule
TI Debt Concentration and Bargaining Power: Large Banks, Small Banks, and Secondary Prices. AU Fernandez, Raquel; Ozler, Sule.

Pacelli, Lia
TI Job Tenure and Labour Market Regulation: A Comparison of Britain and Italy Using Micro Data. AU Burgess, Simon; Rees, Hedley; Pacelli, Lia.

Pala, Ozge
TI Maximizing the Simulation Output: A Competition. AU Kleijnen, Jack P. C.; Pala, Ozge.

Parry, Ian W. H.
PD March 1997. TI When Can Carbon Abatement Policies Increase Welfare? The Fundamental Role of Distorted Factor Markets. AU Parry, Ian W. H.; Williams III, Roberton C.; Goulder, Lawrence H. AA Parry: Resources for the Future. Williams III: Stanford University. Goulder: Stanford University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5967; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 33. PR $5.00. JE D52, H23, L51. KW Public Economics.
AB This paper employs analytical and numerical general equilibrium models to assess the efficiency impacts of two policies to reduce U.S. carbon emissions -- a carbon tax and a carbon quota -- taking into account the interactions between these policies and pre-existing tax distortions in factor markets. We show that tax interactions significantly raise the costs of both policies relative to what they would be in a first-best setting. In addition, we show that these interactions put the carbon quota at a significant efficiency disadvantage relative to the carbon tax: the costs of reducing emissions by 10 percent are more than three times higher under the carbon quota than under the carbon tax. This disadvantage reflects the inability of the quota policy to generate revenue that can be used to reduce pre- existing distortionary taxes. Indeed, second-best considerations severely limit the potential of a carbon quota to generate overall efficiency gains. Under our central estimates, a non-auctioned carbon quota (or set of grandfathered carbon emissions permits) cannot increase efficiency unless the marginal benefits from avoided future climate change are at leas $25 per ton of carbon abatement. Most estimates of these marginal environmental benefits are well below $25 per ton.

Paserman, M. Daniele
TI Overidentification Tests with Grouped Data. AU Hoxby, Caroline; Paserman, M. Daniele.

Paul, Thierry
TI Unemployment and the 'Labour-Management Conspiracy'. AU Karp, Larry; Paul, Thierry.

Pepper, John V.
TI Monotone Instrumental Variables with an Application to the Returns to Schooling. AU Manski, Charles F.; Pepper, John V.

Peretto, Pietro
PD January 1998. TI Specialization, Knowledge Dilution. and Scale Effects in an IO-Based Growth Model. AU Peretto, Pietro; Smulders, Sjak. AA Peretto: Duke University. Smulders: CentER and Tilburg University. SR Tilburg CentER for Economic Research Discussion

Paper: 9802; CenER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 29. PR no charge. JE L11, L23, O31, O40. KW Growth. Specialization. Scale Effects. Spillovers. Innovation.

AB The authors present a model where accumulation of non-rival knowledge drives growth but where the scale effect, which may be positive or negative, vanishes asymptotically. This result stems from the interaction between technological differentiation and market structure dynamics. Firms are linked to each other in networks of spillovers determined by the technological proximity of their activities. These spillovers-networks span only a fraction of the total economy and the average technological distance between firms increases with the size of the economy. When the economy expands, less related activities become profitable and specialization increases. As a result, the networks expand at a slower pace than the overall economy. In the limit, the networks cease to grow with the size of the economy. A larger economy, therefore, accumulates a larger total stock of knowledge but not necessarily a larger effective stock of knowledge that is useful to the individual firm.

Pericli, Andreas
TI The Asymmetric Relation Between Margin Requirements and Stock Market Volatility Across Bull and Bear Markets. AU Hardouvelis, Gikas; Pericli, Andreas; Theodossiou, Panayiotis.

Persson, Torsten
PD November 1997. TI Comparative Politics and Public Finance. AU Persson, Torsten; Roland, Gerard; Tabellini, Guido. AA Persson: Stockholm University. Roland: Universite Libre de Bruxelles. Tabellini: IGIER, Universita Bocconi. SR Centre for Economic Policy Research, Discussion Paper: 1737; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.ccpr.demon.co.uk. PG 37. PR 5 pounds or $10.00. JE D72, D78, H00. KW Political Economics. Comparative Politics. Public Finance. Legislative Cohesion. Electoral Accountability.

AB This paper presents a model of electoral accountability to compare the public finance outcomes under a presidential-congressional and a parliamentary system. In a presidential-congressional system, contrary to a parliamentary system, there are no endogenous incentives for legislative cohesion, but this allows for a clearer separation of powers. These features lead to clear differences in the public finance performance of the two systems. A parliamentary system has redistribution towards a majority, less underprovision of public goods, more waste and a higher burden of taxation, whereas a presidential-congressional system has redistribution towards a minority, more underprovision of public goods, but less waste and a smaller size of government.

Pesendorfer, Wolfgang
TI Abstention in Elections with Asymmetric Information and Diverse Preferences. AU Feddersen, Timothy J.; Pesendorfer, Wolfgang.

Petrongolo, Barbara
TI Regional Imbalances and Aggregate Performance in a Leading Sector Model of the Labour Market: An Analysis on Italian Data 1977-1991. AU Manacorda, Marco; Petrongolo, Barbara.

PD September 1998. TI Re-Employment Probabilities and Returns to Matching. AA Centre for Economic Performance, London School of Economics and University of Madrid. SR London School of Economics, Centre for Economic Performance Discussion Paper: 406; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 24. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE J41, J63, J64. KW Matching Function. Duration Models. Returns to Scale. Unemployment.

AB The assumption of constant returns in the matching function, embodied in most bilateral search models, is crucial to ensure the uniqueness of the unemployment rate along a steady state growth path. This paper explores whether this is an acceptable assumption by estimating individual re-employment probabilities on a sample of entrants into unemployment. This is done by applying hazard models to survey data on both completed and uncompleted unemployment durations. The hypothesis of constant returns to matching is not rejected, on the basis of the evidence that the job-finding hazard only depends on local labor market tightness. and it is independent of its size.

Philipson, Tomas
PD February 1997. TI Observational Agency and Supply-Side Econometrics. AA University of Chicago and National Bureau of Economic Research. SR National Bureau of Economic Research Technical Paper: 210; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE C81, I11. KW Health Care. Agency Problem. Wage Discrimination. Data. Identification.

AB A central problem in applied empirical work is to separate out the patterns in the data that are due to poor data production, such as e.g. non-response and measurement errors, from the patterns attributable to the economic phenomena studied. This paper interprets this inference problem as being an agency problem in the market for observations and suggests ways in which using incentives may be useful to overcome it. The paper discusses how wage discrimination may be used for identification of economic parameters of interest taking into account the responses in survey supply by sample members to that discrimination. Random wage discrimination alters the supply behavior of sample members across the same types of populations in terms of outcomes and thereby allows for separating out poor supply from the population parameters of economic interest. Using such schemes to correct mean estimates of physician earnings increases those earnings by about one third.

Pierreval, H.
TI New Species of Hybrid Pull Systems. AU Gaury, E. G. A.; Pierreval, H.; Kleijnen, Jack P. C.

Pindyck, Robert S.
TI A Markup Interpretation of Optimal Rules for Irreversible Investment. AU Dixit, Avinash; Pindyck, Robert S.; Sodal, Sigbjorn.

Portes, Richard
TI The Emergence of the Euro as an International Currency.
AU Alogoskoufis, George; Portes, Richard; Rey, Helene.

Poterba, James M.
PD April 1997. TI The History of Annuities in the United States. AA Massachusetts Institute of Technology and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6001; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 50. PR $5.00. JE D91, G22. KW Aging. Asset Pricing. Corporate Finance. Public Economics.
AB This paper summarizes the development of private annuity markets in the United States. Annuities constituted a small share of the U.S. insurance market until the 1930's, when two developments contributed to their growth. First, concerns about the stability of the financial system drove investors to products offered by insurance companies, which were perceived to be stable institutions. Flexible payment deferred annuities, which permit investors to save and accumulate assets as well as draw down principal, grew rapidly in this period. Second, the group annuity market for corporate pension plans began to develop in the 1930's. The group annuity market grew more rapidly than the individual annuity market for several decades after World War II. The most recent development in the annuity marketplace has been the rapid expansion of variable annuities. These annuity products combine the investment features of mutual funds with the tax deferral available for life insurance products. Variable annuity premium payments increased by a factor of five in the most recent five years for which data are available.

TI New Evidence on the Money's Worth of Individual Annuities. AU Mitchell, Olivia S.; Poterba, James M.; Warshawsky, Mark J.

Prasad, Eswar S.
TI Identifying the Common Component in International Economic Fluctuations. AU Lumsdaine, Robin L.; Prasad, Eswar S.

Prat, Andrea
PD December 1997. TI Campaign Advertising and Voter Welfare. AA CentER and Tilburg University. SR Tilburg CentER for Economic Research Discussion Paper: 97118; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 40. PR no charge. JE D72, D82, M37. KW Elections. Campaign Contributions. Advertising. Voter Welfare. Split Contributions.
AB This paper investigates the role of campaign advertising and the opportunity of legal restrictions on it. An electoral race is modeled as a signaling game with three classes of players: a continuum of voters, two candidates, and one interest group. The group has non-verifiable insider information on the candidates' valence and, on the basis of this information, offers a contribution to each candidate in exchange for a favorable policy position. Candidates spend the contributions they receive on non-directly informative advertising. This paper

shows that: (1) A separating equilibrium exists in which the group contributes to a candidate only if the insider information about that candidate is positive; (2) Although voters are fully rational, a ban on campaign advertising can be welfare-improving; and (3) Split contributions may arise in equilibrium (and should be prohibited).

Prestwich, Kevin M.
TI The Demand for Broad Money in the United Kingdom, 1878-1993. AU Ericsson, Neil R.; Hendry, David F.; Prestwich, Kevin M.

Primo Braga, Carlos A.
TI Protection and Trade in Services: A Survey. AU Hoekman, Bernard; Primo Braga, Carlos A.

Pritsker, Matt
PD May 1997. TI Nonparametric Density Estimation and Tests of Continuous Time Interest Rate Models. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/26; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 41. PR no charge. JE C12, C14, E43, G12. KW Interest Rates. Nonparametric. Bandwidth. Specification Tests.
AB A number of recent papers have used nonparametric density estimation or nonparametric regression to study the instantaneous spot interest rate, and to test term structure models. However, little is known about the performance of these methods when applied to persistent time-series, such as U.S. interest rates. This paper uses the tractability of the Vasicek (1977) model of interest rates to characterize the performance of a kernel density estimator in finite samples, and contrast it with asymptotic theory. The author's principle results in finite samples show that the persistence of the interest rate process is important for the optimal bandwidth and the quality of the kernel estimator. The author also finds that the asymptotic distribution severely understates finite sample bias, variance, and correlation. The author also examines one of Ait-Sahalia's (1996a) nonparametric tests of parametric continuous-time Markov models of the instantaneous spot interest rate.

Propper, Carol
TI "I Vont To Be Alone" Transitions to Independent Living, Marriage and Divorce Among Young Americans. AU Burgess, Simon; Propper, Carol; Aassve, Arnstein.

Puga, Diego
TI Agglomeration in the Global Economy: A Survey of the 'New Economic Geography'. AU Ottaviano, Gianmarco I. P.; Puga, Diego.

Quah, Danny
TI The New Empirics of Economic Growth. AU Durlauf, Steven N.; Quah, Danny.

TI Technology in Growth. AU Keely, Louise; Quah, Danny.

Rabin, Matthew

TI Incentives for Procrastinators. AU O'Donoghue, Ted; Rabin, Matthew.

Rady, Sven

TI Housing Market Fluctuations in a Life-Cycle Economy with Credit Constraints. AU Ortalo-Magne, Francois; Rady, Sven.

Raff, Daniel

PD June 1997. TI Sears Roebuck in the Twentieth Century: Competition, Complementarities, and the Problem of Wasting Assets. AU Raff, Daniel; Temin, Peter. AA Raff: University of Pennsylvania and National Bureau of Economic Research. Temin: Massachusetts Institute of Technology and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 102; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE L21, L81, N12, N72. KW Economic History. American Economy. Sears Roebuck. Investment. Retail.
AB Sears Roebuck and Co. faced similar challenges in the 1920's and the 1980's. On the strength of the early period's strategic investment decisions, the company grew into the nation's largest retailer and a pervasive factor in the economy. In the later period, unanswered challenges nearly destroyed the company. The authors analyze the elements that contributed to the success in the 1920's and to the near disaster in the 1980's and place them in a broader and more systematic context. They argue that successful innovations combine a focus on an attractive market with an exploitation and even enhancement of a firm's existing competitive strengths.

Rajah, N.

TI School Quality, Exam Performance, and Career Choice. AU Dustmann, C.; Rajah, N.; van Soest, Arthur.

Rajan, Balachandra

PD March 1998. TI India in the United Nations: The First Years. AA University of Western Ontario. SR University of Western Ontario, Papers in Political Economy: 85; Department of Economics, University of Western Ontario, London, Ontario N6A 5C2, Canada. PG 22. PR no charge. JE F42, N45. KW United Nations. India.
AB The author discusses India's positioning and repositioning in the United Nations in the early years of its existence. He begins by saying that the various provisions of the United Nations Charter are in contention with each other and that, as a result, it is a highly indeterminate document, subject at all times to the politics of reading. One of the provisions of the United Nations Charter speaks of the rights of peoples and nations to self-determination, and India, at the San Francisco Conference, was influential in insisting on the inclusion of the word "peoples", recognizing that a people under domination could be denied the title of "nationhood".

Ramirez, Alejandro

PD December 1997. TI Economic Growth and Human Development. AU Ramirez, Alejandro; Ranis, Gustav; Stewart, Frances. AA Ramirez: United Nations Development Program. Ranis: Yale University. Stewart: University of Oxford. SR Yale Economic Growth Center Discussion Paper: 787; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 47. PR $2.00 plus postage. JE J24, O11, O15, O40, P51. KW Human Development. Growth. Resource Allocation. Income Distribution. Poverty.
AB This paper explores the links between economic growth and human development, identifying two chains, one from economic growth to human development, the other, from human development to economic growth. The importance of various links in each chain are explored empirically with the help of cross-country statistics for the period 1970-92. Public expenditures on health and education, notably female, represent especially important links determining the strength of the relationship between economic growth and human capital development. The investment rate and income distribution are significant links determining the strength of the relationship running from development to economic growth. These two-way chains can generate self-reinforcing, virtuous or vicious cycles of development, as well as identifying lopsided performers. Over time the authors find that lop-sided development seldom persists: countries initially in favor of economic growth lapse into the vicious category, while countries favoring human development advance into the virtuous category.

Ranis, Gustav

PD May 1996. TI The Trade-Growth Nexus in Taiwan's Development. AA Yale University. SR Yale Economic Growth Center Discussion Paper: 758; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 41. PR $2.00 plus postage. JE F14, F43, O19, O40, O53. KW Trade. Growth. Linkages. Development. Taiwan.
AB This paper analyzes Taiwan's post-World War II development success as a consequence of the mutually beneficial interactions between its export performance and domestic growth. Not only does trade stimulate growth, but the reverse causality also holds true. Growth enhances trade performance by augmenting domestic response capabilities to new export opportunities, and by stimulating previously dormant demands for goods and services, thereby creating a two-way linkage. The paper demonstrates that during the 1950's and early 1960's, Taiwan's processed food exports boomed as a result of domestically generated agricultural productivity growth. Next it shows that as the Taiwanese economy shifted its focus towards export-oriented production during the 1960's, total factor productivity increased, induced by changes in human resource and technology policies. This permitted the rapid growth of labor intensive manufactured exports, stimulated by the surplus of cheap but disciplined labor, combining with simple imported technology and an educational emphasis on secondary education.

PD September 1996. TI Successes and Failures of Development Experience Since the 1980's. AA Yale University. SR Yale Economic Growth Center Discussion Paper: 762; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 28. PR $2.00 plus postage. JE F34, F35, O11, O19, O23. KW Development. Structural Adjustment. Stabilization. Development Banks. East Asian Miracle.
AB This paper reviews the development experience since the 1980's and finds room for guarded optimism about what we can

learn from it. Firstly, a global consensus is emerging on the need for macro-economic stability through prudent fiscal, monetary and foreign exchange policies. However, at the micro or structural level, while governments need to decentralize their decision-making authority more fully, in reaction to the recent reappraisal of the East Asian model there is some danger that development policy will swing too far in rejecting liberalization and returning to government intervention. Secondly, the paper points out that, while there exists a well-recognized causal nexus between exports and growth, the reverse causation also holds. Finally, although fast-disbursing policy-based loans have not been as successful as they could be, they represent potentially highly effective instruments that should not be abandoned. Rather, the Bank should help render such loans more fully "owned" by recipients.

PD February 1997. TI The Micro-Economics of "Surplus Labor". AA Yale University. SR Yale Economic Growth Center Discussion Paper: 772; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 24. PR $2.00 plus postage. JE J22, J31, O10, Q12. KW Real Wages. Labor Surplus. Labor Markets. Agriculture.
AB This paper examines the apparent conflict between the classical assumption of a bargaining agricultural sector wage and the neo-classical assumption of a competitive wage in the context of a labor surplus developing economy. It concludes that the relatively inelastic supply of labor hours offered by low income small or landless farmers in the static micro-economic leisure/work context is perfectly consistent with the persistence for some time of an institutional real wage offered to the non-agricultural sector of the dual economy. Empirical evidence is brought to bear in support of that position.

PD December 1997. TI Reflections. AA Yale University. SR Yale Economic Growth Center Discussion Paper: 786; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 29. PR $2.00 plus postage. JE O11, O23, O53, P16. KW Economic Development. Political Economy. Taiwan. Dutch Disease. Democracy.
AB This paper examines the causes of Taiwan's exceptional economic performance, focusing on the influence of organizational and policy choices and how Taiwan's example differs from those of more typical less-developed countries. After briefly citing cultural factors as proposed by his late colleague John Fei, Ranis proceeds to explore the issues of organic nationalism, natural resource endowment, access to foreign capital and other political factors that have produced such economic success. The author demonstrates how Taiwan's unique combination of strong organic nationalism, meager natural resources and limited access to foreign capital helped curb the Extended Dutch Disease phenomenon endemic in LDCs. In addition, the government's nonoscillatory, relatively laissez-faire fiscal and monetary policies, encouragement of technological innovation, plus generous educational, R&D and infrastructural expenditures have contributed to low rates of inflation and high rates of GDP growth. The paper finally suggests a positive correlation between democracy and economic development.

TI Economic Growth and Human Development. AU Ramirez, Alejandro; Ranis, Gustav; Stewart, Frances.

Ranjan Das, Sanjiv
PD March 1997. TI Taming the Skew: Higher-Order Moments in Modeling Asset Price Processes in Finance. AU Ranjan Das, Sanjiv; Sundaram, Rangarajan K. AA Ranjan Das: Harvard University and National Bureau of Economic Research. Sundaram: Stern School of Business, New York University. SR National Bureau of Economic Research Working Paper: 5976; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 42. PR $5.00. JE G12. KW Asset Pricing.
AB It is widely acknowledged that many financial markets exhibit a considerably greater degree of kurtosis (and sometimes also skewness) than is consistent with the Geometric Brownian Motion model of Black and Scholes (1973). Among the many alternative models that have been proposed in this context, two have become especially popular in recent years: models of jump-diffusions, and models of stochastic volatility. This paper explores the statistical properties of these models with a view to identifying simple criteria for judging the consistency of either model with data from a given market; our specific focus is on the patterns of skewness and kurtosis that arise in each case as the length of the interval of observations changes. We find that, regardless of the precise parameterization employed, these patterns are strikingly similar within each class of models, enabling a simple consistency test along the desired lines. As an added bonus, we find that for most parameterizations, the set of possible patterns differs sharply across the two models, so that data from a given market will typically not be consistent with both models. However, there exist exceptional parameter configurations under which skewness and kurtosis in the two models exhibit remarkably similar behavior from a qualitative standpoint.

Rauch, James E.
TI Anonymous Market and Group Ties in International Trade. AU Casella, Alessandra; Rauch, James E.

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

PD February 1997. TI On the Optimality of Interest Rate Smoothing. AU Rebelo, Sergio; Xie, Danyang. AA Rebelo: University of Rochester and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5947; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 28. PR $5.00. JE E31, E43, E52, O42. KW Economic Fluctuations. Growth. Monetary Economics.
AB This paper studies some continuous-time cash-in-advance models in which interest rate smoothing is optimal. We consider both deterministic and stochastic models. In the stochastic case we obtain two results of independent interest: (i) we study what is, to our knowledge, the only version of the neoclassical model under uncertainty that can be solved in closed form in continuous time; and (ii) we show how to characterize the competitive equilibrium of a stochastic continuous time model that cannot be computed by solving a planning problem. We also discuss the scope for monetary policy to improve welfare in an economy with a suboptimal real competitive equilibrium, focusing on the particular example of an economy with externalities.

PD   August 1997. TI   What Happens When Countries Peg Their Exchange Rates? (The Real Side of Monetary Reforms). AA   Northwestern University. SR   Centre for Economic Policy Research, Discussion Paper: 1692; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.co.uk. PG   32. PR   5 pounds or $10.00.   JE   F41.   KW Exchange Rates. Macroeconomic Stabilization. Fiscal Policy.
AB   There is a well-known set of empirical regularities that describe the experience of countries that peg their exchange rate as part of a macroeconomic adjustment policy. Following-the-peg economies tend to experience an increase in GDP, a large expansion of production in the non-tradable sector, a contraction in tradables production, a current account deterioration, an increase in the real wage, a reduction in unemployment, a sharp appreciation in the relative price of non- tradables and a boom in the real estate market. This paper discusses how the changes in the expected behavior of fiscal policy that tend to be associated with the peg can contribute to explaining these facts.

PD   August 1997. TI   Beyond Balanced Growth. AU   Rebelo, Sergio; Kongsamut, Piyabha; Xie, Danyang. AA   Rebelo: Northwestern   University.   Kongsamut: University of Rochester. Xie: Hong Kong University. SR   Centre for Economic Policy Research, Discussion Paper: 1693; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG   64. PR   5 pounds or $10.00. JE   O14, O41. KW   Growth. Structural Change.
AB   One of the most striking regularities of the growth process is the massive reallocation of Labour from agriculture into industry and services. Balanced growth models are commonly used in macroeconomics because they are consistent with the well-known Kaldor facts about economic growth. Unfortunately, these models are inconsistent with the structural change dynamics that are a central feature of economic development. This paper discusses models with generalized balanced growth paths. These paths retain some of the key features of balanced growth, but are consistent with the observed Labour reallocations dynamics. The conventional explanation for the observed patterns of structural change is that the rate of technical progress has been higher in agriculture than in services. We show that this pattern of technical progress is neither necessary nor sufficient to account for the observed dynamics of structural change. The key to producing these reallocation dynamics are differences in the income elasticity of the demand for the goods produced by the different sectors.

Rebitzer, James B.
TI   The Sociology of Groups and the Economics of Incentives: Theory and Evidence on Compensation Systems. AU   Encinosa III, William E.; Gaynor, Martin; Rebitzer, James B.

Rees, Hedley
TI   A Disaggregate Analysis of the Evolution of Job Tenure in Britain, 1975-93. AU   Burgess, Simon; Rees, Hedley.

TI   Job Tenure and Labour Market Regulation: A Comparison of Britain and Italy Using Micro Data. AU   Burgess, Simon; Rees, Hedley; Pacelli, Lia.

Rey, Helene
TI   The Emergence of the Euro as an International Currency. AU   Alogoskoufis, George; Portes, Richard; Rey, Helene.

TI   The Emergence of the Euro as an International Currency. AU   Alogoskoufis, George; Portes, Richard; Rey, Helene.

Rhody, Stephen E.
TI   Labor Earnings Mobility and Inequality in the United States and Germany During the Growth Years of the 1980's. AU   Burkhauser, Richard V.; Holtz-Eakin, Douglas; Rhody, Stephen E.

Richardson, James
PD   April 1998. TI   Do Wage Subsidies Enhance Employability?   Evidence   from   Australian   Youth. AA   London School of Economics. SR   London School of Economics, Centre for Economic Performance Discussion Paper: 387; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG   34. PR   5 pounds for individual copies; 95 pounds for yearly subscription. JE   E24, J23, J38, J64, J68. KW   Wage Subsidies. Labor Markets. Unemployment. Employability. Australia.
AB   The authors examine a panel of unemployed Australian youth to investigate whether participation in a wage subsidy program offers merely a temporary respite from unemployment, or whether there are longer-lasting positive employability effects. Controlling for selection bias using a bivariate probit analysis, the authors estimate the effect of participation in the Special Youth Employment Training Program on the probability of being employed in subsequent waves of the data, up to an average of 26 months after subsidy expiry. They find that far from breaking up when support expires, subsidies extend short duration jobs. Furthermore, they find large and significant effects of participation on the subsequent employability. Much of this arises from retention of subsidized jobs, but even excluding this the authors find evidence of longer-term positive effects.

Ridder, Geert
TI   Combining Panel Data Sets with Attrition and Refreshment Samples. AU   Hirano, Keisuke; Imbens, Guido W.; Ridder, Geert; Rubin, Donald B.

Riker, David A.
TI   Are U.S. Multinationals Exporting U.S. Jobs? AU   Brainard, S. Lael; Riker, David A.

PD   March 1997. TI   U.S. Multinationals and Competition from Low Wage Countries. AU   Riker, David A.; Brainard, S. Lael. AA   Riker: University of California, San Diego. Brainard: Old Executive Office Building and National Bureau of Economic Research. SR   National Bureau of Economic Research Working Paper: 5959; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG   30. PR $5.00. JE   F23, J23. KW   International Trade. Investment.
AB   It is often argued that the globalization of production places workers in industrialized countries in competition with their counterparts in low wage countries. We examine a firm-level panel of foreign manufacturing affiliates owned by U.S. multinationals between 1983 and 1992 and find evidence to the

contrary. Affiliate activities in developing countries appear to be complementary to rather than substituting for affiliate activities in industrialized countries. Workers do compete across affiliates, but the competition is between affiliates in countries with similar workforce skill levels. The results suggest that multinationals with affiliates in countries at different stages of development decompose production across borders into complementary stages that differ by skill intensity. The implied complementarity of traded intermediate inputs has important implications for the empirical debate over trade, employment, and wages.

Ringel, Jeanne S.

TI   Can Higher Cigarette Taxes Improve Birth Outcomes?
AU   Evans, William N.; Ringel, Jeanne S.

Robertson, Donald

TI   Pre-School Education and Attainment in the NCDS and BCS. AU Feinstein, Leon; Robertson, Donald; Symons, James.

Robinson, Daniel J.

PD February 1998. TI Polling for Votes: CCF and Liberal Political Marketing, 1940-1945. AA University of Toronto. SR University of Western Ontario, Papers in Political Economy: 86; Department of Economics, University of Western Ontario, London, Ontario N6A 5C2, Canada. PG 40. PR no charge. JE D72, D73, N42. KW Polling. Canada. Elections. Policy Formation.
AB Party polling began in the 1940's, not the 1960's. Indeed, many features of 1960's party polling were strikingly in evidence a generation earlier. Both times the Liberal Party was in the forefront, on each occasion helped by the survey expertise of Americans. Both eras saw a close working relationship between Liberal officials and advertising professionals. Wartime Liberal party polling did not match the scale and sophistication of the 1960's surveys, but the earlier polling program constituted the Canadian genesis of 'political marketing', the adaptation of market research methods to party policy formation and electoral politics. While the Liberals adopted polling prior to the 1945 election, the CCF did not. Though Canada's first "political consumer survey" appeared in the Canadian Forum, challenging the CCF to apply market research techniques to politics, the party was unable to answer the call.

Robinson, Helen

TI   Something in the Way She Moves: A Fresh Look at an Old Gap. AU Manning, Alan; Robinson, Helen.

Robitaille, Patrice

PD December 1997. TI Private Payments Systems in Historical Perspective: The Banco Central System of Mexico. AA Federal Reserve Board. SR Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 599; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 44. PR no charge. JE E42, N26. KW Payments Systems. Free Banking. Competitive Currencies. Central Banking. Mexico.
AB Payments systems have grown considerably and have

become increasingly complex, prompting regulators to reassess their roles and renewing interest in historical experiences with payments systems. In this paper, the author studies the Banco Central System of Mexico, which was a bank note par redemption and clearing system for other payments that operated in Mexico City from 1899 until 1913. The author first describes the origins of the Banco Central System. The author then considers whether it became prone to behavioral problems, as some observers contended. It is found that although Banco Central was less well-positioned to address incentive problems relative to one of its counterparts in the United States (the Suffolk Bank of Boston), it did act to constrain bank behavior. However, considerable government intervention weakened the disciplinary role of Banco Central and thus made the system more prone to collapse.

Rodrik, Dani

PD February 1997. TI TFPG Controversies, Institutions, and Economic Performance in East Asia. AA Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5914; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 37. PR $5.00. JE F43, O30, O47, O53. KW Economic Fluctuations. Growth. International Trade. Investment.
AB The controversy over the appropriate partitioning of East Asian growth into accumulation versus technical change has overlooked a fundamental indeterminacy in measurement. As a result, we cannot rule out the possibility that East Asia has in fact experienced a tremendous amount of technological progress of the labor-saving kind. Second, an index of institutional quality (drawn from work by Knack and Keefer (1995) and Easterly and Levine (1996)) does exceptionally well in rank- ordering East Asian countries according to their growth performance. A parsimonious specification containing only initial income, initial education, and institutional quality accounts for virtually all of the variation in the growth performance in the region, even when institutional quality is instrumented. Finally, the experience of Hong Kong, which has had a flat investment ratio since the 1960's, is consistent with the idea that making the transition from a low- investment economy to a high-investment economy requires a hands-on government.

Rogers, Diane Lim

TI   Neglected Effects on the Uses Side: Even a Uniform Tax Would Change Relative Goods Prices. AU Fullerton, Don; Rogers, Diane Lim.

Rogers, John H.

PD May 1998. TI Monetary Shocks and Real Exchange Rates. AA Federal Reserve Board. SR Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 612; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 51. PR no charge. JE E51, F31. KW Exchange Rates. Monetary Shocks. Vector Autoregressions. Real Shocks.
AB Many explanations of the stylized facts concerning real exchange rate movements focus on monetary shocks, but it is often found empirically that monetary shocks are unimportant.

The author provides evidence that is contrary to this empirical finding. Using over 100 years of data, the author estimates the contribution of various shocks to explaining variation in the real pound-dollar exchange rate. Monetary shocks consist of both monetary base and money multiplier shocks; real shocks include fiscal, productivity, and preference shocks. Estimates of several alternative VAR specifications provide a range for the contribution of the various shocks: from 19 to 60 percent in the short- run for monetary shocks and 4 to 26 percent for fiscal and productivity shocks combined. The modeling strategy and results are compared directly to related work. The results lend empirical support to the convention in recent quantitative general equilibrium modeling of focusing on monetary shocks.

TI Puzzles in the Chinese Stock Market. **AU** Fernald, John; Rogers, John H.

Rogerson, Richard
TI The Determinants of Public Education Expenditures: Evidence From the States, 1950-1990. **AU** Fernandez, Raquel; Rogerson, Richard.

Roland, Gerard
TI Comparative Politics and Public Finance. **AU** Persson, Torsten; Roland, Gerard; Tabellini, Guido.

Roller, Lars-Hendrik
PD May 1997. **TI** Why Firms Form Research Joint Ventures: Theory and Evidence. **AU** Roller, Lars-Hendrik; Tombak, Mihkel M.; Siebert, Ralph. **AA** Roller and Siebert: Wissenschaftszentrum Berlin fur Sozialforschung (WZB), Germany. Tombak: Helsinki School of Economics, Finland. **SR** Centre for Economic Policy Research, Discussion Paper: 1654; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 30. **PR** 5 pounds or $10.00. **JE** L60, O30. **KW** Research and Development. Joint Ventures. Product Market Competition.
AB The literature on research joint ventures (RJV's) has emphasized internalizing spillovers and cost-sharing as motives for RJV formation. In this paper we develop two additional explanations: product market complementarities and firm heterogeneity. We analyze a model of RJV's with asymmetric firms and differentiated products. We then test these various explanations for RJV formation using data now available through the U.S. National Cooperative Research Act.

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

Rosen, Harvey S.
PD March 1997. **TI** The Way We Were (And Are): Changes in Public Finance and Its Textbooks. **AA** Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5972; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** $5.00. **JE** B20, H89. **KW** Public Economics.
AB This paper uses a comparison of a contemporary Public Finance textbook with one written in the 1940's as a vehicle for assessing the changes in the field since the beginning of the

National Tax Journal 50 years ago. The comparison indicates that there have been major changes in the field. From a methodological point of view, the most important change is the embrace of microeconomic theory as the framework for analyzing both positive and normative issues. In addition, the incorporation of econometrics has dramatically affected the field. With respect to topical coverage, research in Public Finance has changed along with the items on the public policy agenda, and the results of this new research have made their way into contemporary textbooks. But there is continuity as well as change: some topics and their treatments have metamorphosed very little in the last half century.

Rotemberg, Julio J.
PD May 1998. **TI** An Optimization-Based Econometric Framework for the Evaluation of Monetary Policy: Expanded Version. **AU** Rotemberg, Julio J.; Woodford, Michael. **AA** Rotemberg: Harvard Business School and National Bureau of Economic Research. Woodford: Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 233; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** $5.00. **JE** E37, E43, E52. **KW** Monetary Policy. Interests Rates. Rational Expectations. Inflation.
AB This paper considers a simple quantitative model of output, interest rate and inflation determination in the United States, and uses it to evaluate alternative rules by which the Fed may set interest rates. The model is derived from optimizing behavior under rational expectations. The model matches the estimated responses to a monetary policy shock quite well and, once due account is taken of other disturbances, can account for the data nearly as well as an unrestricted VAR. The monetary policy rule that most reduces inflation variability requires very variable interest rates, which in turn is possible only in the case of a high average inflation rate. But even in the case of a constrained- optimal policy inflation would be stabilized considerably more and output stabilized considerably less than under the authors' estimates of current policy. Moreover, this constrained-optimal policy also allows average inflation to be much smaller.

Rouse, Cecilia Elena
PD March 1997. **TI** Private School Vouchers and Student Achievement: An Evaluation of the Milwaukee Parental Choice Program. **AA** Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5964; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 39. **PR** $5.00. **JE** I20. **KW** Children. Labor Studies. Public Economics.
AB In 1990, Wisconsin became the first state in the country to provide vouchers to low income students to attend non-sectarian private schools. In this paper, I use a variety of estimation strategies and samples to estimate the effect of the program on math and reading scores. First, since schools selected students randomly from among their applicants if the school was oversubscribed, I compare the academic achievement of students who were selected to those who were not selected. Second, I present instrumental variables estimates of the effectiveness of private schools (relative to public schools) using the initial selection as an instrumental variable for attendance at a private school. Finally, I used a fixed-effects

strategy to compare students enrolled in the private schools to a sample of students from the Milwaukee public schools. I find that the Milwaukee Parental Choice Program appears to have had a positive effect on the math achievement of those who attended a private school; but had no benefits for reading scores. I have found the results to be fairly robust to data imputations and sample attrition, however these limitations should be kept in mind when interpreting the results.

Rousseau, Peter L.
TI Business Activity and the Boston Stock Market, 1835-1869. AU Atack, Jeremy; Rousseau, Peter L.

Rubin, Donald B.
TI Combining Panel Data Sets with Attrition and Refreshment Samples. AU Hirano, Keisuke; Imbens, Guido W.; Ridder, Geert; Rubin, Donald B.

Rustichini, Aldo
TI A Unique Subjective State Space for Unforeseen Contingencies. AU Dekel, Eddie; Lipman, Barton L.; Rustichini, Aldo.

Saari, Donald G.
PD January 1997. TI Explaining Positional Voting Paradoxes I: The Simple Case. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1179; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 23. PR $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. JE D71, D72. KW Positional Voting. Voting Paradoxes. Condorcet Winner.
AB A theory is developed to explain all possible (single profile) positional voting paradoxes. This includes all pairwise voting cycles, problems with agendas, conflict between the Borda and Condorcet winners, and differences among positional outcomes (such as the plurality and antiplurality methods). The author shows how to construct profiles to illustrate all of these paradoxes. Among the new conclusions contradicting accepted belief is that rather than being a standard for the field, the Condorcet winner has serious flaws. This paper discusses three candidates; the companion paper (25) handles n is greater to or equal to 3 candidates.

PD April 1997. TI Explaining Positional Voting Paradoxes II: The General Case. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1187; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 38. PR $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. JE D71, D72. KW Positional Voting. Voting Paradoxes. Condorcet Winner.
AB A theory is developed to explain all possible positional voting paradoxes coming from a single but arbitrarily chosen profile. This includes all pairwise voting cycles, all conflict

between Borda and Condorcet winners and rankings, all disagreement in outcomes among positional procedures, and all discrepancies among rankings for any positional procedure as candidates are dropped or added. The theory explains why each of the possible paradoxes occurs while describing how to construct illustrating profiles. It is shown how to use this approach to derive properties of other procedures based on positional voting methods. The three candidate results of a companion paper are extended to an arbitrary number of candidates.

Sachs, Jeffrey D.
PD February 1997. TI Understanding China's Economic Performance. AU Sachs, Jeffrey D.; Woo, Wing Thye. AA Sachs: Harvard Institute for International Development and National Bureau of Economic Research. Woo: University of California. SR National Bureau of Economic Research Working Paper: 5935; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 51. PR $5.00. JE O53, O57, P51. KW Economic Fluctuations. Growth.
AB Broadly speaking, two schools of thought have emerged to interpret China's rapid growth since 1978: the experimentalist school and the convergence school. The experimentalist school attributes China's successes to the evolutionary, experimental, and incremental nature of China's reforms. Specifically, the resulting non-capitalist institutions are claimed to be successful in (a) agriculture where land is not owned by the farmers; (b) township and village enterprises (TVE's) which are owned collectively by rural communities; and (c) state owned enterprises (SOE's) where increased competition and increased wage incentive, but not privatization, have been emphasized. The convergence school holds that China's successes are the consequences of its institutions being allowed to converge with those of non-socialist market economies, and that China's economic structure at the start of reforms is a major explanation for the rapid growth. China had a high population density heavily concentrated in low-wage agriculture, a condition that was favorable for labor-intensive export-led growth in other parts of East Asia. The convergence school also holds that China's gradualism results primarily from a lack of consensus over the proper course, with power still divided between market reformers and old-style socialists; and that the "innovative" non-capitalist institutions are responses to China's political circumstances and not to its economic circumstances.

Sack, Brian
TI Inventories, Production Smoothing and the Shape of the Cost Function. AU Guiso, Luigi; Galeotti, Marzio; Sack, Brian; Schiantarelli, Fabio.

Sala-i-Martin, Xavier X.
TI The Optimum Quantity of Money: Theory and Evidence. AU Mulligan, Casey B.; Sala-i-Martin, Xavier X.

Salkever, David S.
PD February 1997. TI Within Group "Structural" Tests of Labor-Market Discrimination: A Study of Persons with Serious Disabilities. AU Salkever, David S.; Domino, Marisa E. AA Salkever: The Johns Hopkins University School of Hygiene and Public Health and National Bureau of Economic Research. Domino: The Johns Hopkins University School of

Hygiene and Public Health. **SR** National Bureau of Economic Research Working Paper: 5931; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 16. **PR** $5.00. **JE** I10. **KW** Health Care. Labor Studies.
AB Labor-market discrimination measures are usually derived from between-group comparisons of market outcomes for favored vs. disfavored groups, controlling for productivity-related individual characteristics. When the disfavored group is heterogeneous, one can relate variations in discrimination intensity to market outcomes within the disfavored group. We use this approach to test for employment and wage discrimination against persons with various types of disabilities. Measures of "social distance" and employer judgments of "employability" are controls for the intensity of discrimination. In a national sample of adults with serious disabilities, employment discrimination effects are in the "wrong" direction, however, and wage effects are unstable. Thus, variability in labor market outcomes among different types of disabilities is not explained well by variations in discrimination intensity correlated with social distance and employer attitudes. We conjecture that differences in available support services by type of disability may help to explain this variability.

Samwick, Andrew A.
TI Pension and Social Security Wealth in the Health and Retirement Study. **AU** Gustman, Alan L.; Mitchell, Olivia S.; Samwick, Andrew A.; Steinmeier, Thomas L.

TI Pension and Social Security Wealth in the Health and Retirement Study. **AU** Gustman, Alan L.; Mitchell, Olivia S.; Samwick, Andrew A.; Steinmeier, Thomas L.

Sandholm, William H.
PD December 1997. **TI** An Evolutionary Approach to Congestion. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1198; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 47. **PR** $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C61, C72, C73, D62, R41, R48. **KW** Evolutionary Game Theory. Network Congestion.
AB Using techniques from evolutionary game theory, the authors analyze potential games with continuous player sets, a class of games which includes a general model of network congestion as a special case. They concisely characterize both the complete set of Nash equilibria and the set of equilibria which are robust against small disturbances of aggregate behavior. They provide a strong evolutionary justification of why equilibria must arise. The authors characterize situations in which stable equilibria are socially efficient, and show that in such cases, evolution always increases aggregate efficiency. Applying these results, they construct a parameterized class of congestion tolls under which evolution yields socially optimal play. Finally, they characterize potential games with continuous player sets by establishing that a generalization of these games is precisely the limiting version of finite player potential games (Monderer and Shapley (1996)) which satisfy an anonymity condition.

Sandroni, Alvaro
PD September 1997. **TI** The Speed of Rational Learning. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1192; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 19. **PR** $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C72, C73, D83. **KW** Repeated Games. Rational Learning. Convergence Speed.
AB A stage game is played infinitely many times. After observing the outcomes of the game, players revise their beliefs about opponents' strategies. The author shows the general conditions under which players' predictions become accurate fast.

PD November 1997. **TI** Learning, Rare Events, and Recurrent Market Crashes in Frictionless Economies Without Intrinsic Uncertainty. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1199; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 20. **PR** $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D83, E32. **KW** Convergence. Rational Expectations. Learning. Rare Events. Market Crashes.
AB In this paper the author considers a dynamically complete market model without intrinsic uncertainty. The only uncertainty is modeled by sunspots. Agents' beliefs are heterogeneous, but eventually become homogeneous in the sense that agents' beliefs are identical in the limit. The author shows that if some states of nature occur rarely then arbitrarily large market crashes may occur infinitely often. This result contrasts with Cass and Shell's (83) results which show that when beliefs are homogeneous, in complete markets without intrinsic uncertainty, sunspots do not matter.

PD November 1997. **TI** Reciprocity and Cooperation in Repeated Coordination Games: The Blurry Belief Approach. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1200; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 19. **PR** $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C70, D83. **KW** Repeated Games. Learning. Cooperation. Bounded Rationality. Equilibrium Selection.
AB Two long lived players play a repeated coordination game. Players do not specify a single (and correct) probability to each event. They have a vague notion about the evolution of the play, called blurry beliefs, which guide their behavior. General conditions that ensure cooperation are investigated.

Sapir, Andre
PD November 1997. **TI** The Political Economy of EC

Regionalism. AA Institut d'Etudes Europeennes, Belgium. SR Centre for Economic Policy Research, Discussion Paper: 1739; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 16. PR 5 pounds or $10.00. JE F13, F15. KW Trade Liberalization. Preferential Trading. Political Economy.

AB Many observers have noted a recent proliferation of regional trade agreements primarily centered in or on Europe. The paper analyzes the causes and consequences of EC regionalism. It begins by examining the development and importance of the phenomenon. It finds that although the EC maintains preferential trade arrangements with virtually all countries, preferential trade accounts for no more than 25% of total EC trade. The paper investigates the causes of EC regionalism, focusing on the determinants of both the demand by third countries and the supply by the EC. Lastly, it examines future options.

Sargent, Robert G.
TI A Methodology for Fitting and Validating Metamodels in Simulation. AU Kleijnen, Jack P. C.; Sargent, Robert G.

Sarno, Lucio
TI The Behaviour of Real Exchange Rates During the Post-Bretton Woods Period. AU Taylor, Mark P.; Sarno, Lucio.

Saunders, Anthony
TI The Effects of Bank Mergers and Acquisitions on Small Business Lending. AU Berger, Allen N.; Saunders, Anthony; Scalise, Joseph M.; Udell, Gregory F.

Savin, N. E.
TI Learning in Sender-Receiver Games. AU Blume, Andreas; De Jong, Douglas V.; Neumann, George R.; Savin, N. E.

Scalise, Joseph M.
TI The Effects of Bank Mergers and Acquisitions on Small Business Lending. AU Berger, Allen N.; Saunders, Anthony; Scalise, Joseph M.; Udell, Gregory F.

TI The Effects of Bank Mergers and Acquisitions on Small Business Lending. AU Berger, Allen N.; Saunders, Anthony; Scalise, Joseph M.; Udell, Gregory F.

Schaling, Eric
PD February 1998. TI Incentive Contracts for Central Bankers Under Certainty: Walsh-Svensson Non- Equivalence Revisited. AU Schaling, Eric; Hoeberichts, Marco; Eijffinger, Sylvester. AA Schaling: Bank of England. Hoeberichts: CentER and Tilburg University. Eijffinger: CentER, Tilburg University and College of Europe and Humboldt. SR Tilburg CentER for Economic Research Discussion Paper: 9811; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 25. PR no charge. JE E42, E52, E58. KW Non-Linearities. Economic Fluctuations. Inflation Targets. Optimal Contracts.
AB The authors look at the implications of uncertain monetary policy preferences for the targeting and contracting approach to monetary stability. It turns out that in the presence
of uncertain preferences a linear incentive contract in the sense of Walsh (1995) performs better in terms of social welfare than an explicit inflation target as proposed by Svensson (1997). The reason is that, although both approaches can get rid of the inflationary bias, the impact of uncertain preferences on the variance of inflation will be considerably higher with an inflation target. The authors also find that on top of an optimal linear contract or target, a quadratic contract, in the sense of Rogoff's (1985) "weight-conservative" central banker, improves the outcome. In the case of an inflation target, a more conservative banker is needed than with a Walsh contract.

Scharfstein, David S.
PD March 1997. TI The Dark Side of Internal Capital Markets: Divisional Rent-Seeking and Inefficient Investment. AU Scharfstein, David S.; Stein, Jeremy C. AA Massachusetts Institute of Technology and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5969; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 37. PR $5.00. JE G30. KW Corporate Finance.
AB We develop a model that shows how rent-seeking behavior on the part of division managers can subvert the workings of an internal capital market. In an effort to stop rent-seeking, corporate headquarters will be effectively forced into paying bribes to some division managers. And because headquarters is itself an agent of outside investors, the bribes may take the form not of cash, but rather of preferential capital budgeting allocations. One interesting feature of our model is a kind of "socialism" in internal capital allocation, whereby weaker divisions tend to get subsidized by stronger ones.

Schiantarelli, Fabio
TI Inventories, Production Smoothing and the Shape of the Cost Function. AU Guiso, Luigi; Galcotti, Marzio; Sack, Brian; Schiantarelli, Fabio.

Schiff, Maurice
TI Regional Integration as Diplomacy. AU Winters, L. Alan; Schiff, Maurice.

Schnitzer, Monika
TI The Economic Institution of International Barter. AU Marin, Dalia; Schnitzer, Monika.

Schnure, Calvin
PD August 1997. TI Internal Capital Markets and Investment: Do the Cash Flow Constraints Really Bind? AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series: 1997/39; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 24. PR no charge. JE E22, G31. KW Cash Flow. Investment. Liquidity Constraint.
AB Lamont (1997) claims to find evidence of credit market imperfections that distort financing and investment decisions of a sample of oil- dependent firms, as investment by nonoil units fell when oil cash flow dropped. However, a simple test reveals that few of these firms behaved in a fashion consistent with binding cash flow constraints. In addition, most were cash rich.

The data provide strong evidence against the hypothesis that investment decisions by nonoil units were significantly affected by oil cash flow, or that credit market imperfections are an important factor for this set of firms.

Schotman, Peter C.
TI   Measuring Risk Attitudes in a Natural Experiment: Data From the Television Game Show Lingo. AU   Beetsma, Roel M. W. J.; Schotman, Peter C.

Schultz, T. Paul
PD   September 1997. TI   Labor Unions and the Distribution of Wages and Employment in South Africa. AU   Schultz, T. Paul; Mwabu, Germano. AA   Schultz: Yale University. Mwabu: WIDER. SR   Yale Economic Growth Center Discussion Paper: 776; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG   51. PR $2.00 plus postage. JE   J15, J22, J23, J31, J51. KW   Labor Unions. Wages. Employment. South Africa.
AB   Labor unions are an important economic and political force in South Africa. Inequality in wage rates is among the largest in the world in South Africa, with African and white workers receiving wages that differ by a factor of five. The complex role of unions in closing and creating this wage gap is assessed in this paper. Union membership among Africa male workers is shown to be associated in 1993 with their receiving wages that are 145 percent higher than comparable nonunion workers in the bottom decile of the wage distribution, and 19 percent higher in the top decile. Quantile regression estimates also indicate the returns to observed productive characteristics of workers, such as education and experience, are larger for nonunion than union workers. If the large union relative wage effect were reduced in half, the authors estimate employment of African youth, age 16-29, would increase by two percentage points.

PD   November 1997. TI   Income Inequality in Taiwan 1976-1995: Changing Family Composition, Aging, and Female Labor Force Participation. AA   Yale University. SR   Yale Economic Growth Center Discussion Paper: 778; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG   56. PR $2.00 plus postage. JE   J12, J16, J21, O15, O53. KW   Income Inequality. Taiwan. Full Income. Family Composition.
AB   Change in income inequality in Taiwan from 1964 to 1995 is sensitive to how household incomes are adjusted for household composition. The reasonable practice of dividing household income by persons (or adults) in the household eliminates the widely noted increase in income inequality from 1980 to 1995, and calls into question whether income inequality decreased substantially from 1964 to 1975. The increasing share of the population over age 30 that is associated with the demographic transition has contributed only slightly to increasing income inequality across all ages. The entry of women into the labor force is concentrated among higher wage groups, and thus when one attributes a shadow wage to the time of all persons, regardless of how much they work in the labor force, this broader measure of "full income" inequality is more equal than market income inequality, and it has decreased over time.

PD   January 1998. TI   Inequality in the Distribution of

Personal Income in the World: How it is Changing and Why. AA   Yale University. SR   Yale Economic Growth Center Discussion Paper: 784; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG   65. PR $2.00 plus postage. JE   D31, F20, J16, O15. KW   World Inequality. Household Inequality. Gender Inequality. Income Distribution.
AB   The variance in the logarithms of per capita GDP in purchasing-power- parity prices increased in the world from 1960 to 1968 and decreased since the mid 1970's. In the later period the convergence in inter- country incomes more than offset any increase in within-country inequality. Approximately two-thirds of this measure of world inequality is inter-country, three-tenths inter-household within country inequality, and one-twentieth between gender differences in education. If China is excluded from the world sample, the decline in world inequality after 1975 is not evident. Much improved data will be required to infer with confidence the character of trends in household and gender inequality.

PD   February 1998. TI   Wage Premia for Education and Location, by Gender and Race in South Africa. AU   Schultz, T. Paul; Mwabu, Germano. AA   Schultz: Yale University. Mwabu: WIDER. SR   Yale Economic Growth Center Discussion Paper: 785; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG   63. PR $2.00 plus postage. JE   I21, H52, J31. KW   Wage Structure. Educational Quotas. Education. South Africa.
AB   Despite the lower quality of education provided Africans compared with whites in South Africa, the percentage wage gains associated with additional years of primary, secondary, and higher education are substantially larger for Africans than for whites in 1993, and they increase for both race groups at higher education levels. The lower quantity (or political quotas) of education received by Africans rather than whites is a simple explanation for the wage structure documented in this paper. The other two racial groups, colored and Indians, occupy intermediate positions between whites and Africans in terms of both the quantity of education received and wage returns to those levels of education. As barriers to employment by race are dismantled in South Africa, wage differences between races are likely to diminish, while within-group wage differences may widen. Quantitative expansion of educational opportunities for nonwhites at the secondary and higher education levels seems to be overdue.

Scott, Andrew
TI   Sticky Prices and Volatile Output: Or when is a Phillips Curve not a Phillips Curve? AU   Ellison, Martin; Scott, Andrew.

Shapiro, Matthew D.
PD   March 1997. TI   Alternative Strategies for Aggregating Prices 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 Working Paper: 5980; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG   26. PR $5.00. JE   C82, E31. KW   Economic Fluctuations. Growth. Monetary Economics. Productivity.
AB   The Consumer Price Index does not take into account the

fact that consumers alter the composition of their purchases in response to changes in relative prices. This substitution effect will cause the CPI to grow faster than the cost of living. This paper presents new estimates showing that this bias in the CPI averaged 0.3 percentage points per year between December 1986 and December 1995. This bias could be eliminated by using a superlative index to aggregate prices across the item-area strata of the CPI. The paper discusses the practical difficulties in implementing such a calculation and suggests a method for overcoming them. In particular, it shows how to construct an accurate approximation to a superlative price index that can be published with the same timeliness as the CPI.

Shiller, Robert J.
TI The Significance of the Market Portfolio.
AU Athanasoulis, Stefano; Shiller, Robert J.

Shin, Hyun Song
PD October 1997. TI Adversarial and Inquisitorial Procedures in Arbitration. AA Nuffield College. SR Centre for Economic Policy Research, Discussion Paper: 1722; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 40. PR 5 pounds or $10.00. JE D73, D74, D82, K23, K40. KW Legal Procedure. Persuasion Games. Asymmetric Information. Advocates. Inquisitor.
AB Should arbitrators adjudicate on the basis of their own investigations, or invite the interested parties to make their cases and decide on the basis of the information so gathered? I call the former the inquisitorial procedure in arbitration and the latter the adversarial procedure. I conduct a welfare comparison of the two procedures by constructing a game-theoretic model of decision making by an arbitrator in the face of self-interested reporting strategies by the interested parties. Even if it is assumed that the arbitrator is, on average, as well informed as the two opposing parties, the adversarial procedure is strictly superior. The source of this superiority lies in a non-convexity in the adversarial procedure. There are increasing marginal returns to improvements in the information of an interested party. There are no analogous increasing returns to the arbitrator's information under the inquisitorial procedure.

Shioji, Etsuro
PD October 1997. TI Identifying Monetary Policy Shocks in Japan. AA Shioji: Universitat Pompeu Fabra. SR Centre for Economic Policy Research, Discussion Paper: 1733; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 36. PR 5 pounds or $10.00. JE C32, E52, E58. KW Monetary Policy. Structural VAR. Identification.
AB It is sometimes argued that central banks influence the private economy in the short run through controlling a specific component of high powered money, not its total amount. Using a structural VAR approach, this paper evaluates this claim empirically, in the context of the Japanese economy. It estimates a model based on the standard view that the central bank controls the total amount of high powered money, and another model based on the alternative view that it controls only a specific component. It is shown that the former yields much more sensible estimates than the latter.

Shleifer, Andrei
TI A Model of Investor Sentiment. AU Barberis, Nicholas; Shleifer, Andrei; Vishny, Robert W.

Sibert, Anne C.
TI Monetary Union, Entry Conditions and Economic Reform. AU Ozkan, F. Gulcin; Sutherland, Alan; Sibert, Anne C.

TI Transition Issues for the European Monetary Union.
AU Buiter, Willem H.; Sibert, Anne C.

TI Monetary Regimes and Labour Market Reform.
AU Sutherland, Alan; Sibert, Anne C.

Sicherman, Nachum
TI Technological Change and Wages: An Inter-Industry Analysis. AU Bartel, Ann P.; Sicherman, Nachum.

Siebert, Ralph
TI Why Firms Form Research Joint Ventures: Theory and Evidence. AU Roller, Lars-Hendrik; Tombak, Mihkel M.; Siebert, Ralph.

Singh, Lakhwinder
TI Economic Growth, International Technological Spillovers and Public Policy: Theory and Empirical Evidence from Asia. AU Evenson, Robert E.; Singh, Lakhwinder.

Sinn, Hans-Werner
PD November 1997. TI The Value of Children and Immigrants in a Pay-As-You-Go Pension System: A Proposal For a Partial Transition to a Funded System. AA Sinn: CES, Universitat Munchen. SR Centre for Economic Policy Research, Discussion Paper: 1734; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 28. PR 5 pounds or $10.00. JE H55, J60. KW Pay-As-You-Go. Pension Systems. Immigration. Children.
AB It is shown that the net fiscal externality created by an additional member of a pay-as-you-go-pension system that is endowed with individual accounts equals the gross contributions of this member. In Germany, this equals about 175,000 Deutsche marks. The paper uses this information to design a hybrid funded system that avoids this externality and improves the public pension system under equity and efficiency considerations.

PD December 1997. TI Eurowinners and Eurolosers: The Distribution of Seigniorage Wealth in EMU. AU Sinn, Hans-Werner; Feist, Holger. AA Universitat Munchen. SR Centre for Economic Policy Research, Discussion Paper: 1747; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 27. PR 5 pounds or $10.00. JE E58, F33, F42. KW Central Banks. European Integration. Monetary Union. Seigniorage.
AB The European Monetary Union will involve socialization of existing seigniorage wealth of national central banks. This socialization will create windfall gains for countries with relatively low monetary bases such as France and the United Kingdom and will be disadvantageous for countries like Germany, Spain, the Netherlands and Austria, who will suffer per capita wealth losses of between ECU 406 and ECU 182.

The paper quantifies the gains and losses in seigniorage wealth under alternative membership and bank regulation scenarios.

Slikker, Marco

PD February 1998. TI Average Convexity in Communication Situations. AA CentER and Tilburg University. SR Tilburg CentER for Economic Research Discussion Paper: 9812; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 21. PR no charge. JE C71. KW Communication. Average Convexity. Inheritance.
AB In this paper the authors study inheritance properties of average convexity in communication situations. They show that the underlying graph ensures that the graph- restricted game originating from an average convex game is average convex if and only if every subgraph associated with a component of the underlying graph is the complete graph or a star graph. Furthermore, the authors study inheritance of (average) convexity of the associated potential games.

PD March 1998. TI A Note on Link Formation. AA CentER and Tilburg University. SR Tilburg CentER for Economic Research Discussion Paper: 9820; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. PG 10. PR no charge. JE C71, C72. KW Game Theory. Cooperation Structures.
AB In this note the authors study the endogenous formation of cooperation structures. According to several equilibrium concepts the full cooperation structure will form or some structure that is payoff-equivalent to the full cooperation structure. As a by-product the authors find a class of games in strategic form where several equilibrium concepts coincide.

Small, David H.

TI A Quantitative Exploration of the Opportunistic Approach to Disinflation. AU Orphanides, Athanasios; Small, David H.; Wieland, Volker; Wilcox, David W.

Smets, Frank

PD November 1997. TI Financial Asset Prices and Monetary Policy: Theory and Evidence. AA Banks for International Settlements. SR Centre for Economic Policy Research, Discussion Paper: 1751; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 28. PR 5 pounds or $10.00. JE E44, E52. KW Asset Prices. Monetary Policy. Monetary Conditions Index.
AB The work presented in this paper falls into two parts. First, using a simple model and within the context of the central bank's objective of price stability, it is shown that the optimal monetary response to unexpected changes in asset prices depends on how these changes affect the central bank's inflation forecast, which in turn depends on two factors: the role of the asset price in the transmission mechanism and the typical information content of innovations in the asset price. In this context, the advantages and disadvantages of setting monetary policy in terms of a weighted average of a short-term interest rate and an asset price such as the exchange rate -- a Monetary Conditions Index (MCI) -- are discussed. The second, more empirical, part of the paper, uses an estimated policy reaction

function, to document the short-term response to financial asset prices, including the exchange rate, in two countries with inflation targets (Australia and Canada) and suggest that the different response to exchange rate changes in these countries can in part be explained by differences in their underlying sources.

TI Exchange Rate Regimes and the Expectations Hypothesis of the Term Structure. AU Gerlach, Stefan; Smets, Frank.

Smorodinski, Rann

TI Pivotal Players and the Characterization of Influence. AU Al-Najjar, Nabil I.; Smorodinski, Rann.

Smulders, Sjak

TI Specialization, Knowledge Dilution. and Scale Effects in an IO-Based Growth Model. AU Peretto, Pietro; Smulders, Sjak.

TI Capital Mobility and Catching Up in a Two-Country, Two-Sector Model of Endogenous Growth. AU van de Klundert, Theo; Smulders, Sjak.

Snower, Dennis J.

TI Expanding the Welfare System: A Proposal for Reform. AU Orszag, J. Michael; Snower, Dennis J.

TI Youth Unemployment and Government Policy. AU Orszag, J. Michael; Snower, Dennis J.

Sodal, Sigbjorn

TI A Markup Interpretation of Optimal Rules for Irreversible Investment. AU Dixit, Avinash; Pindyck, Robert S.; Sodal, Sigbjorn.

Soderlind, Paul

PD June 1997. TI Evaluating Portfolio Performance with Stochastic Discount Factors. AU Soderlind, Paul; Dahlquist, Magnus. AA Soderlind: IIES, University of Stockholm. Dahlquist: Stockholm School of Economics. SR Centre for Economic Policy Research, Discussion Paper: 1663; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 48. PR 5 pounds or $10.00. JE G11, G12, G23. KW GMM Estimators. Intersection Tests. Spanning Tests. Mean-Variance Analysis. Mutual Funds.
AB This paper provides evidence on the use of stochastic discount factors in the evaluation of portfolio performance. First, we discuss evaluation in this setting, and relate it to traditional mean-variance analysis. We then use Monte Carlo experiments to examine the small sample properties of generalized method of moment (GMM) estimators. Both size and power properties are characterized for various GMM approaches. Finally, we apply the methodology to Swedish-based mutual funds. We offer an evaluation allowing for passive as well as dynamic strategies. The conditional evaluation indicates that funds may have had superior performance over the sample period.

Sokoloff, Kenneth L.

TI Location and Technological Change in the American Glass Industry During the Late Nineteenth and Early Twentieth Centuries. AU Lamoreaux, Naomi R.; Sokoloff, Kenneth L.

TI Inventors, Firms, and the Market for Technology: U.S.

Manufacturing in the Late Nineteenth and Early Twentieth Centuries. AU Lamoreaux, Naomi R.; Sokoloff, Kenneth L.

PD April 1997. TI Manufacturing Where Agriculture Predominates: Evidence from the South and Midwest in 1860. AU Sokoloff, Kenneth L.; Tchakerian, Viken. AA Sokoloff: University of California and National Bureau of Economic Research. Tchakerian: California State University. SR National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 100; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE N10, N51, O13, Q11. KW Economic History. American Economy. Agriculture. Manufacturing. Productivity.

AB The authors employ the 1860 Census of Manufactures to study rural antebellum manufacturing in the South and Midwest, and find that manufacturing output per capita was similar across regions in counties specialized in the same agricultural products. The southern deficit in manufactures per capita appears to have been largely attributable to the very low levels of output in counties specialized in cotton production. This implies that it was the South's capabilities for the highly profitable cotton production, not the existence of slavery per se, that was responsible for the region's limited industrial development. The other major finding is that in both the South and the Midwest measured total factor productivity was significantly lower in counties specialized in wheat. This is consistent with suggestions that agricultural districts where the predominant crops were highly seasonal in their requirements for labor were well suited to support manufacturing enterprise during the offpeak periods.

Song Shin, Hyun
TI Unique Equilibrium in a Model of Self-Fulfilling Currency Attacks. AU Morris, Stephen; Song Shin, Hyun.

Sorensen, Bent E.
TI Income and Consumption Smoothing Among U.S. States: Regions or Clubs? AU Yosha, Oved; Sorensen, Bent E.

Spiller, Pablo T.
TI The Evolution of Advanced Large Scale Information Infrastructure in the United States. AU Greenstein, Shane M.; Lizardo, Mercedes M.; Spiller, Pablo T.

Sprinkle, Geoffrey B.
TI Evolution of Communication With Partial Common Interest. AU Blume, Andreas; DeJong, Douglas V.; Kim, Yong-Gwan; Sprinkle, Geoffrey B.

Sprumont, Y.
TI Core Representations of the Standard Fixed Tree Game. AU Koster, Maurice; Molina, E.; Sprumont, Y.; Tijs, S.

Srinivasan, T. N.
PD December 1995. TI Regionalism and the World Trade Organization: is Non-Discrimination Passe? AA Yale University. SR Yale Economic Growth Center Discussion Paper: 767; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 29. PR $2.00 plus postage. JE F13, F15, F42. KW Most Favored Nation. National Treatment. Non-Discrimination. GATT. World Trade Organization.

AB The principle of non-discrimination as enunciated in its Articles I on General Most Favored Nation Treatment and III on National Treatment is the foundation of the General Agreement on Tariffs and Trade and its successor, the World Trade Organization. Yet, articles of GATT included many exceptions to MFN, of which one of the most serious was Article XXIV relating to Customs Unions and Free Trade Areas. The paper begins with a discussion of the reasons for the failure of the Working Party mechanism set forth in the Article XXIV for examining the consistency of proposed PTA's with GATT. It then briefly surveys the recent literature on regionalism and multilateralism. It examines the concept of "open regionalism" that has been advanced by the United States in particular and finds it problematic. The paper concludes with a discussion of how further progress towards a non-discriminatory world trading system could be made.

PD December 1996. TI Trade and Human Rights. AA Yale University. SR Yale Economic Growth Center Discussion Paper: 765; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu.egc. PG 38. PR $2.00 plus postage. JE F13, F15, F41, F42, J28. KW Human Rights. Labor Standards. International Trade. Developing Countries. World Trade Organization.

AB The use, or threat of use, of trade policy instruments to ensure that human rights are respected by governments of partner countries is not new. The paper analyzes the moral, philosophical and economic arguments for and against linking trade and human rights. It finds that while claims of universality of labor standards are overblown, addressing the legitimate concerns that citizens of one country may have about what they deem "poor" conditions of work or "exploitation" of children by parents or employers in other countries does not require the use of trade sanctions. The fact that the proposal for a social clause is being pushed by major developed countries when labor-intensive imports from developing countries are penetrating their markets suggests that protectionist interests have captured the drive for labor standards. The paper concludes with a discussion of the role of multilateral institutions in improving labor standards.

PD December 1997. TI As the Century Turns: Analytics, Empirics and Politics of Development. AA Yale University. SR Yale Economic Growth Center Discussion Paper: 783; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. Website: www.econ.yale.edu/egc. PG 72. PR $2.00 plus postage. JE F43, O10, O38, O41. KW Development. Growth. Openness. Trade. Technology.

AB The paper celebrates John Fei's life and contributions to economics by viewing them in the context of recent theoretical and empirical literature on the economics and politics of growth. It summarizes the lessons from the literature and development experience since the end of the second world war on the roles of the state, markets and other institutions in the development process. It highlights a major lesson, on which there is substantial agreement if not a consensus, on the importance of openness to foreign trade, technologies and capital flows to growth and on the importance of participatory democracy for political sustainability of growth-promoting policies.

Staiger, Robert W.

TI Regionalism and Multilateral Tariff Cooperation. **AU** Bagwell, Kyle; Staiger, Robert W.

TI Reciprocity, Non-Discrimination and Preferential Agreements in the Multilateral Trading System. **AU** Bagwell, Kyle; Staiger, Robert W.

Stambaugh, Robert F.

PD February 1997. **TI** Analyzing Investments Whose Histories Differ in Length. **AA** University of Pennsylvania and National Бureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5918; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 50. **PR** $5.00. **JE** C11, G11, G15. **KW** Asset Pricing.

AB This study explores multivariate methods for investment analysis based on a sample of return histories that differ in length across assets. The longer histories provide greater information about moments of returns, not only for the longer-history assets, but for the shorter- history assets as well. To account for the remaining parameter uncertainty, or "estimation risk," portfolio opportunities are characterized by a Bayesian predictive distribution. Examples involving emerging markets demonstrate the value of using the combined sample of histories and accounting for estimation risk, as compared to truncating the sample to produce equal-length histories or ignoring estimation risk by using maximum-likelihood estimates.

Steedman, Hilary

TI Basic Competence in Mathematics: Swedish and English 16-year-olds. **AU** Wolf, Alison; Steedman, Hilary.

TI Growing Skills in Europe: the Changing Skills Profiles of France, Germany, the Netherlands, Portugal, Sweden and the UK. **AU** Murray, Asa; Steedman, Hilary.

Stehm, Jeff

TI Analyzing Alternative Intraday Credit Policies in Real-Time Gross Settlement Systems. **AU** Furfine, Craig; Stehm, Jeff.

Stein, Jeremy C.

TI Leverage and House-Price Dynamics in U.S. Cities. **AU** Lamont, Owen; Stein, Jeremy C.

TI The Dark Side of Internal Capital Markets: Divisional Rent-Seeking and Inefficient Investment. **AU** Scharfstein, David S.; Stein, Jeremy C.

Stevens, David

TI The Reallocation of Labour and the Lifecycle of Firms. **AU** Burgess, Simon; Lane, Julia; Stevens, David.

TI Jobs, Workers and Changes in Earnings Dispersion. **AU** Burgess, Simon; Lane, Julia; Stevens, David.

Stewart, Frances

TI Economic Growth and Human Development. **AU** Ramirez, Alejandro; Ranis, Gustav; Stewart, Frances.

Stock, James H.

PD August 1996. **TI** Asymptotically Median Unbiased Estimation of Coefficient Variance in a Time Varying Parameter Model. **AU** Stock, James H.; Watson, Mark W. **AA** Stock: Harvard University and National Bureau of Economic Research. Watson: Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 201; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** $5.00. **JE** C13, C51, O40. **KW** Coefficient Variance. Parameter Models. Unobserved Components. Growth. Stationary Regressors.

AB This paper considers the estimation of the variance of coefficients in time varying parameter models with stationary regressors. The maximum likelihood estimator has large point mass at zero. The authors therefore develop asymptotically median unbiased estimators and confidence intervals by inverting median functions of regression-based parameter stability test statistics, computed under the constant-parameter null. These estimators have good asymptotic relative efficiencies for small to moderate amounts of parameter variability. They apply these results to an unobserved components model of trend growth in postwar U.S. GDP: the MLE implies that there has been no change in the trend rate, while the upper range of the median-unbiased point estimates imply that the annual trend growth rate has fallen by 0.7 percentage points over the postwar period.

Strauss, Robert P.

TI Community Choice and Local Public Services: A Discrete Choice Approach. **AU** Nechyba, Thomas J.; Strauss, Robert P.

Strijbosch, L. W. G.

TI Repeated Audit Controls. **AU** Moors, J. J. A.; van der Genugten, B. B.; Strijbosch, L. W. G.

Suijs, Jeroen

TI On the Balancedness of M-Sequencing Games. **AU** Hamers, Herbert; Klijn, Flip; Suijs, Jeroen.

PD March 1998. **TI** Optimal Design of Pension Funds: A Mission Impossible. **AU** Suijs, Jeroen; De Waegenaere, Anja; Borm, Peter. **AA** CentER and Tilburg University. **SR** Tilburg CentER for Economic Research Discussion Paper: 9825; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg, The Netherlands. Website: cwis.kub.nl/few5/center/center.htm. **PG** 28. **PR** no charge. **JE** D82, G22, G23, H55. **KW** Pension Funds. Insurance. Bayesian Implementation.

AB Nowadays many employers offer their employees the possibility of an insurance against too large losses in income when retiring or becoming disabled. This paper models the optimization problem of the employer when setting up such a so-called pension fund. Not surprisingly, it turns out that the optimal solution depends on the premium the employees are willing to pay at most for the insurance. Since this is private information for an employee and hence not known to the employer, he needs to collect information regarding these maximum premiums. It is shown that in most cases the employer is unable to perfectly inform himself on these maximum premiums. So, he cannot create the right incentives for his employees to reveal their maximum premiums truthfully.

Sundaram, Rangarajan K.

TI   Taming the Skew: Higher-Order Moments in Modeling Asset Price Processes in Finance. AU   Ranjan Das, Sanjiv; Sundaram, Rangarajan K.

Surette, Brian J.

PD   September 1997. TI   The Effects of Two-Year College on the Labor Market and Schooling Experiences of Young Men. AA   Board of Governors of the Federal Reserve System. SR   Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series: 1997/44; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG   51. PR   no charge. JE   I21, J23, J24, J31. KW   Two-Year College. Four-Year College. Community College. Training. Returns to Schooling.
AB   This paper uses the NLSY to examine (1) the returns to two-year college, (2) whether attendance at a two-year college helps students to transfer to four-year college, and (3) whether reducing tuition would alter attendance by enough to affect labor outcomes. The author finds that the returns to a year of two-year college are large (7 to 10 percent). Completing an associate's degree raises wages further. One year of two-year credits has the same effect on subsequent four-year attendance as one year of four-year credits. Finally, simulations show that reducing tuition could raise income modestly by increasing college attendance.

Sutch, Richard

TI   Historical Perspectives on the Economic Consequences of Immigration into the United States. AU   Carter, Susan B.; Sutch, Richard.

Sutherland, Alan

TI   Monetary Union, Entry Conditions and Economic Reform. AU   Ozkan, F. Gulcin; Sutherland, Alan; Sibert, Anne C.

PD   November 1997. TI   Monetary Regimes and Labour Market Reform. AU   Sutherland, Alan; Sibert, Anne C. AA   Sutherland: University of York. Sibert: Birkbeck College. SR   Centre for Economic Policy Research, Discussion Paper: 1731; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG   32. PR   5 pounds or $10.00. JE   E61, F33, F42. KW   Policy Coordination. Economic Reform. Monetary Union.
AB   Policy-makers' incentives to undertake costly reform depends on the international monetary system. We consider the effect of monetary regimes on labor market reform. We find international negotiation of monetary policy produces less reform than non-cooperation. Reform is lowest of all with monetary union. Because integration lowers reform, inflation is higher under monetary union than with national currencies. It may be higher or lower with negotiation than no coordination. Despite the negative impact on reform, negotiation produces higher welfare than no coordination. Monetary union can produce higher or lower welfare than either negotiation or no coordination.

Svensson, Lars E. O.

PD   March   1997.   TI   Inflation   Targeting: Some Extensions. AA   Stockholm University and National Bureau of Economic Research. SR   National Bureau of Economic Research Working Paper: 5962; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG   43. PR $5.00. JE   E42, E52, E58. KW   Asset Pricing. International Finance. Macroeconomics. Monetary Economics.
AB   Previous analysis of the implementation of inflation targeting is extended to monetary policy responses to different shocks, consequences of model uncertainty, effects of interest rate smoothing and stabilization, a comparison with nominal GDP targeting, and implications of forward-looking behavior. Model uncertainty, output stabilization, and interest rate stabilization or smoothing all call for a more gradual adjustment of the conditional inflation forecast toward the inflation target. The conditional inflation forecast is the natural intermediate target during inflation targeting.

TI   Transparency and Credibility: Monetary Policy with Unobservable Goals. AU   Faust, Jon; Svensson, Lars E. O.

Sylla, Richard

TI   Debt, Default, and Revenue Structure: The American State Debt Crisis in the Early 1840's. AU   Grinath III, Arthur; Sylla, Richard; Wallis, John Joseph.

Symansky, Steven

TI   Economic Growth and Real Exchange Rate: An Overview of the Balassa- Samuelson Hypothesis in Asia. AU   Ito, Takatoshi; Isard, Peter; Symansky, Steven.

Symons, James

TI   Pre-School Education and Attainment in the NCDS and BCS. AU   Feinstein, Leon; Robertson, Donald; Symons, James.

Tabellini, Guido

TI   Extracting Information from Asset Prices: The Methodology of EMU Calculators. AU   Favero, Carlo A.; Giavazzi, Francesco; Tabellini, Guido; Iacone, Fabrizio.

TI   Extracting Information from Asset Prices: The Methodology of EMU Calculators. AU   Favero, Carlo A.; Giavazzi, Francesco; Tabellini, Guido; Iacone, Fabrizio.

PD   August   1997.   TI   Unemployment,   Growth   and Taxation in Industrial Countries. AU   Tabellini, Guido; Daveri, Francesco. AA   Tabellini: Universita di Brescia and IGIER, Universita Bocconi. Daveri: Universita di Brescia. SR   Centre for Economic Policy Research, Discussion Paper: 1681; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG   64. PR   5 pounds or $10.00. JE   H20, O40. KW   Unemployment. Growth. Taxation. Labor Markets.
AB   To the layperson, the upward trend in European unemployment is related to the slowdown in economic growth. We argue that the layperson's view is correct. The increase in European unemployment and the slowdown in economic growth are related because they stem from a common cause: an excessively high cost of labor. In Europe, labor costs have gone up for many reasons, but one is particularly easy to identify: higher taxes on labor. If wages are set by strong and centralized trade unions, an increase in labor taxes is shifted onto higher real wages. This has two effects. First, it reduces labor demand,

and thus creates unemployment. Second, as firms substitute capital for labor, the marginal product of capital falls; over long periods of time, this in turn diminishes the incentive to accumulate and thus to grow. Thus high unemployment is associated with low growth rates. The model also predicts that the effect of labor taxation differs sharply in countries with different labor market institutions. We test these predictions on data for 14 industrial countries between 1965 and 1991, and find striking support for them. In particular, labor taxes have a strong positive effect on unemployment only in Europe and not in other industrial countries.

TI Comparative Politics and Public Finance. **AU** Persson, Torsten; Roland, Gerard; Tabellini, Guido.

Tan, Li
TI Wage and Price Control Policies in Socialist Transitional Economies. **AU** Fardmanesh, Mohsen; Tan, Li.

Tansel, Aysit
PD April 1998. **TI** Determinants of School Attainment of Boys and Girls in Turkey. **AA** Middle East Technical University. **SR** Yale Economic Growth Center Discussion Paper: 789; Yale University, Economic Growth Center, P.O. Box 208269, New Haven, CT 06520-8269. **Website:** www.econ.yale.edu/egc. **PG** 54. **PR** $2.00 plus postage. **JE** I21, J16. **KW** School Attainments. Gender. Education. Turkey.
AB This study investigates the determinants of school attainments of boys and girls in Turkey. Although high levels of enrollments have been achieved at the primary school level for both boys and girls in much of Turkey, substantial regional differences remain. In particular, in the southeastern region, girls begin to drop out of school around the third grade. Only half of the primary school graduates register at the middle level. Thus, the purpose of this study is to examine the determinants of education attainments at the primary, middle and high school levels. Attainments of boys and girls are examined separately so as to shed light on the causes for the significantly lower level of attainment for girls. Understanding the constraints causing the large gender gap in Turkish education and the covariates related to lower overall educational levels may be useful to policy makers and planners.

Tay, Anthony S.
TI Evaluating Density Forecasts. **AU** Diebold, Francis X.; Gunther, Todd A.; Tay, Anthony S.

Taylor, Alan M.
TI The Great Depression as a Watershed: International Capital Mobility Over the Long Run. **AU** Obstfeld, Maurice; Taylor, Alan M.

PD March 1997. **TI** Latifundia as Malefactor in Economic Development? Scale, Tenancy, and Agriculture on the Pampas, 1880-1914. **AA** Northwestern University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 96; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **Website:** www.nber.org. **PG** not available. **PR** $5.00. **JE** N56, Q12, Q15. **KW** Development. Economic History. Argentina. Agriculture.
AB This paper uses extensive micro-level data from

Argentine agriculture circa 1880-1914 to explore various hypotheses relating to the supposed unusual and favored position enjoyed by the owner-operated large scale estates (latifundia) on the pampas as compared to small-scale units operated by cash tenants and sharecroppers. The author has access to several data sets which allow him to explore whether tenancy and scale mattered as determinants of technique and efficiency in the rural estates of Buenos Aires province. Tenants did not seem disadvantaged in terms of access to land. Accumulation of land in and of itself produced no direct gain in terms of augmented land prices. And tenancy status appears to have mattered very little as a determinant of investment choices. The author concludes that the case against the latifundia, and the pessimistic conventional view of tenant farming on the pampas, rests on little firm quantitative evidence.

TI Nonlinear Aspects of Goods-Market Arbitrage and Adjustment: Heckscher's Commodity Points Revisited. **AU** Obstfeld, Maurice; Taylor, Alan M.

Taylor, M. Scott
TI International Trade Between Consumer and Conservationist Countries. **AU** Brander, James; Taylor, M. Scott.

Taylor, Mark P.
PD November 1997. **TI** The Behaviour of Real Exchange Rates During the Post-Bretton Woods Period. **AU** Taylor, Mark P.; Sarno, Lucio. **AA** Taylor: International Monetary Fund. Sarno: Brunel University. **SR** Centre for Economic Policy Research, Discussion Paper: 1730; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. **Website:** www.cepr.demon.co.uk. **PG** 52. **PR** 5 pounds or $10.00. **JE** F31. **KW** Real Exchange. Purchasing Power Parity. Unit Root. Test Power. Monte Carlo.
AB Tests for long-run purchasing power parity (PPP) may lack power with sample periods corresponding to the span of the recent float, leading researchers to use more powerful multivariate unit root tests. We point out a potential problem with such tests: joint non-stationarity of real exchange rates may be rejected when only one of them is stationary. We suggest another test where the null hypothesis is violated only when all of the processes are stationary. This test is easily constructed and has a known limiting distribution. We investigate the finite-sample empirical performance of both tests using Monte Carlo techniques. Applying the tests to four major real exchange rates over the recent floating rate period, we find strong evidence of long-run PPP.

Tchakerian, Viken
TI Manufacturing Where Agriculture Predominates: Evidence from the South and Midwest in 1860. **AU** Sokoloff, Kenneth L.; Tchakerian, Viken.

Temin, Peter
TI Sears Roebuck in the Twentieth Century: Competition, Complementarities, and the Problem of Wasting Assets. **AU** Raff, Daniel; Temin, Peter.

PD October 1997. **TI** The American Business Elite in Historical Perspective. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper

Series on Historical Factors in Long Run Growth: 104; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE J10, J44, J70, N31. KW Economic History. American Economy. Business Elite. Democratization.
AB This paper replicates a classic study of the American business elite. The older study, done a half-century ago, reported the composition of business leaders a century ago. The author has drawn a sample of business leaders today to discover how much the composition of the American business elite has changed. As in the earlier study, the business elite is compared to a sample of political leaders. The author finds that democratization of the business elite has progressed only slightly in the past century, nowhere near as much as democratization of the political elite. Despite the myriad things that have changed in America in the last century, the composition of the business elite appears recognizably the same.

Tetlow, Robert
TI Expectations, Learning and the Costs of Disinflation: Experiments Using the FRB/US Model. AU Bomfim, Antulio; Tetlow, Robert; Von zur Muehlen, Peter; Williams, John.

Teulings, Coen
TI Wages and the Bargaining Regime in a Corporatist Setting: The Netherlands. AU Hartog, Joop; Leuven, Edwin; Teulings, Coen.

Theodossiou, Panayiotis
TI The Asymmetric Relation Between Margin Requirements and Stock Market Volatility Across Bull and Bear Markets. AU Hardouvelis, Gikas; Pericli, Andreas; Theodossiou, Panayiotis.

Thomakos, Dimitrios D.
TI Structural VAR MARMA and Open Economy Models. AU Dhrymes, Phoebus J.; Thomakos, Dimitrios D.

TI Small Sample Properties of Certain Cointegration Test Statistics: A Monte Carlo Study. AU Dhrymes, Phoebus J.; Thomakos, Dimitrios D.

Thum, Marcel
TI The Economics of Repeated Extortion. AU Choi, Jay Pil; Thum, Marcel.

Thurik, A. Roy
TI Sources of Growth: The Entrepreneurial Versus the Managed Economy. AU Audretsch, David B.; Thurik, A. Roy.

TI Do Services Differ From Manufacturing? The Post-Entry Performance of Firms in Dutch Services. AU Audretsch, David B.; Thurik, A. Roy; Klomp, Luuk.

Tijs, S.
TI Core Representations of the Standard Fixed Tree Game. AU Koster, Maurice; Molina, E.; Sprumont, Y.; Tijs, S.

Tinsley, P. A.
PD June 1997. TI Asymmetric Adjustments of Price and Output. AU Tinsley, P. A.; Krieger, Reva. AA Tinsley: Federal Reserve Board. Krieger: International Monetary Fund. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/31; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 30. PR no charge. JE E31, E32. KW Trend Deviations. Error Correction. Producer Pricing. Price Adjustment.
AB Asymmetries in price adjustment can reconcile contrasts between rapid price movements in inflationary episodes, consistent with classical theories of flexible pricing, and sluggish price responses in contractions, consistent with Keynesian theories of sticky price adjustments. Nonparametric analysis of SIC two-digit industry data indicates that negative asymmetries are more pronounced for real outputs than for nominal outputs, suggesting reversed positive asymmetries in producer pricing. Pricing decision rules are estimated to distinguish between asymmetries in conditioning shocks and asymmetries in producer responses. Two rational motives for asymmetric pricing are supported.

Tombak, Mihkel M.
TI Why Firms Form Research Joint Ventures: Theory and Evidence. AU Roller, Lars-Hendrik; Tombak, Mihkel M.; Siebert, Ralph.

Trejo, Stephen J.
TI The Demand for Hours of Labor: Direct Evidence from California. AU Hamermesh, Daniel S.; Trejo, Stephen J.

Tryon, Ralph
TI The Evolution of Macro Model at the Federal Reserve Board. AU Brayton, Flint; Levin, Andrew T.; Tryon, Ralph; Williams, John C.

Uhlig, Harald
TI An Analysis of the 'Stability Pact'. AU Beetsma, Roel M. W. J.; Uhlig, Harald.

PD July 1997. TI Preferences, Consumption Smoothing, and Risk Premia. AU Uhlig, Harald; Lettau, Martin. AA CentER for Economic Research, Tilburg University. SR Centre for Economic Policy Research, Discussion Paper: 1678; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 44. PR 5 pounds or $10.00. JE E21, E44, G12. KW Asset Prices. Consumption. Risk Premia. Risk Aversion. Preferences.
AB Risk premia in the consumption capital asset pricing model depend on preferences and dividends. We develop a decomposition which allows for the separate treatment of both components. We show that preferences alone determine the risk-return trade-off measured by the Sharpe-ratio. In general, the risk-return trade-off implied by preferences depends on the elasticity of a preference-based stochastic discount factor for pricing assets with respect to the consumption innovation. Depending on the particular specification of preferences, the absolute value of this elasticity may coincide with the inverse of the elasticity of intertemporal substitution (e.g. for habit formation preferences) or the coefficient of relative risk-

aversion (e.g. for Epstein-Zin preferences). We demonstrate that preferences based on a small elasticity of intertemporal substitution, such as habit formation, produce small risk premia once agents are allowed to save. Departing from the complete markets framework, we show that uninsurable risk can only increase the Sharpe-ratio and risk premia if dividends are correlated with individual consumption.

TI   Debt Contracts, Collapse and Regulation as Competition Phenomena. AU   Gersbach, Hans; Uhlig, Harald.

TI   Debt Contracts, Collapse and Regulation as Competition Phenomena. AU   Gersbach, Hans; Uhlig, Harald.

Uppal, Raman
TI   Efficient Intertemporal Allocations with Recursive Utility. AU   Dumas, Bernard; Uppal, Raman; Wang, Tan.

Urga, Giovanni
TI   Are Differences in Firm Size Transitory or Permanent? AU   Geroski, Paul A.; Walters, Chris F.; Urga, Giovanni.

Uribe, Martin
PD   December 1997. TI   Habit Formation and the Comovement of Prices and Consumption During Exchange-Rate-Based Stabilization Programs. AA   Board of Governors of the Federal Reserve System. SR   Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 598; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm.   PG   32. PR   no   charge. JE   E21, E31, E32, F31, F41. KW   Inflation Stabilization. Fixed Exchange Rates. Habit Formation. Durability. Consumption.
AB   A defining stylized fact associated with exchange-rate-based (ERB) stabilization programs is that their initial phase is characterized by several years of expansion in private consumption and a gradual appreciation of the real exchange rate. In this paper, the author argues that standard optimizing models are unable to account for this empirical regularity, as they predict that, except for the date of announcement of the program, an appreciation of the real exchange rate must necessarily be accompanied by a decline in consumption. The author shows that this price-consumption problem can be resolved by relaxing the assumption of time separability in preferences. Specifically, under habit formation a permanent ERB program generates a smooth boom in consumption and gradual real exchange rate appreciation. A temporary program induces, in addition, a smooth boom-recession cycle with the recession beginning before the abandonment of the program.

TI   The Business Cycles of Currency Speculation: A Revision of the Mundellian Framework. AU   Mendoza, Enrique G.; Uribe, Martin.

van de Klundert, Theo
PD   February 1998. TI   Capital Mobility and Catching Up in a Two-Country, Two-Sector Model of Endogenous Growth. AU   van de Klundert, Theo; Smulders, Sjak. AA   Tilburg University. SR   Tilburg CentER for Economic Research Discussion Paper: 9813; CentER for Economic Research, Tilburg University, Warandelaan 2, P.O. Box 90153, 5000 Le Tilburg,   The   Netherlands.   Website: cwis.kub.nl/few5/center/center.htm.   PG   29.   PR   no charge. JE   F12, F21, F43, O41. KW   Leapfrogging. Knowledge Spillovers. Endogenous Growth. Capital Mobility. Nontradables.
AB   Global knowledge spillovers allow backward countries to catch up by accumulating knowledge faster than leading countries. International growth differentials will fall as diminishing returns with respect to the national knowledge stock apply. The domestic growth rate will finally equal the world-wide growth rate, which is endogenous if constant returns apply with respect to all world knowledge stocks taken together. In their two- country two-sector model with firm-specific knowledge, the authors show that there is convergence to a symmetric steady state under balanced trade. Under perfect mobility of financial capital, however, there is leapfrogging in the sense that the initially backward country reaches a higher productivity level in the steady state than the initially leading country. This leapfrogging result is found for countries that are perfectly symmetric in all respects except for initial knowledge stocks. The result is therefore path-dependent, implying that overtaking is higher the larger the initial productivity gap.

van den Berg, Gerard J.
TI   Business Cycles and Compositional Variation in U.S. Unemployment. AU   Abbring, Jaap H.; van den Berg, Gerard J.; van Ours, Jan C.

van den Elzen, Antoon
TI   Computation of the Nash Equilibrium Selected by the Tracing Procedure in N-Person Games. AU   Herings, P. Jean-Jacques; van den Elzen, Antoon.

Van der Duyn, Schouten
TI   Dedication Versus Flexibility in Field Service Operations. AU   Karaesmen, Fikri; Van der Duyn, Schouten; Van Wassenhove, Luk N.

van der Genugten, B. B.
TI   Repeated Audit Controls. AU   Moors, J. J. A.; van der Genugten, B. B.; Strijbosch, L. W. G.

Van Mieghem, Jan A.
PD   November 1997. TI   Investment Strategies for Flexible   Resources.   AA   Northwestern   University. SR   Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1201; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG   25. PR $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. JE   D21, D24, E22. KW   Flexibility. Technology. Capacity Investment. Operational Hedging. Newsvendor Model.
AB   This article studies optimal investment in flexible manufacturing capacity as a function of product prices (margins), investment costs and multivariate demand uncertainty. The author considers a two-product firm that has the option to invest in product-dedicated resources and/or in a flexible resource that can produce either product, but has to make its investment decision before demands are observed. The flexible resource provides the firm with a hedge against demand

uncertainty, but at a higher investment cost than the dedicated resources. The author's analysis highlights the important role of price (margin) and cost mix differentials, which, in addition to the correlation between product demands, significantly affect the investment decision and the value of flexibility. Contrary to the intuition also prevalent in the academic literature, the author shows that it can be advantageous to invest in flexible resources even with perfectly positively correlated product demands.

van Ophem, Hans
TI Explaining International Differences in Male Wage Inequality by Differences in Demand and Supply of Skill. AU Leuven, Edwin; Oosterbeek, Hessel; van Ophem, Hans.

van Ours, Jan C.
TI Business Cycles and Compositional Variation in U.S. Unemployment. AU Abbring, Jaap H.; van den Berg, Gerard J.; van Ours, Jan C.

van Soest, Arthur
TI Family Structure and Female Labour Supply in Mexico City. AU Gong, Xiaodong; van Soest, Arthur.

TI School Quality, Exam Performance, and Career Choice. AU Dustmann, C.; Rajah, N.; van Soest, Arthur.

Van Wassenhove, Luk N.
TI Dedication Versus Flexibility in Field Service Operations. AU Karaesmen, Fikri; Van der Duyn, Schouten; Van Wassenhove, Luk N.

Vegh, Carlos A.
TI Banks and Macroeconomic Disturbances Under Predetermined Exchange Rates. AU Edwards, Sebastian; Vegh, Carlos A.

Verboven, F.
TI Competition on the Dutch Coffee Market. AU Bettendorf, L.; Verboven, F.

Vishny, Robert W.
TI A Model of Investor Sentiment. AU Barberis, Nicholas; Shleifer, Andrei; Vishny, Robert W.

Vives, Xavier
TI Price Dynamics and Consumer Learning. AU Caminal, Ramon; Vives, Xavier.

Von zur Muehlen, Peter
TI Expectations, Learning and the Costs of Disinflation: Experiments Using the FRB/US Model. AU Bomfim, Antulio; Tetlow, Robert; Von zur Muehlen, Peter; Williams, John.

TI Expectations, Learning and the Costs of Disinflation: Experiments Using the FRB/US Model. AU Bomfim, Antulio; Tetlow, Robert; Von zur Muehlen, Peter; Williams, John.

Voorneveld, Mark
TI Regret Equilibria in Games. AU Droste, Edward; Kosfeld, Michael; Voorneveld, Mark.

Wadsworth, Jonathan
TI Grime and Punishment: Job Insecurity and Wage Arrears in the Russian Federation. AU Lehmann, Hartmut; Wadsworth, Jonathan; Acquisti, Alessandro.

Wahba, Sadek
TI Propensity Score Matching Methods for Non-Experimental Causal Studies. AU Dehejia, Rajeev; Wahba, Sadek.

Wallis, John Joseph
TI Debt, Default, and Revenue Structure: The American State Debt Crisis in the Early 1840's. AU Grinath III, Arthur; Sylla, Richard; Wallis, John Joseph.

Walraven, Nicholas
PD May 1997. TI Small Business Lending by Banks Involved in Mergers. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, Finance and Economics Discussion Paper Series: 1997/25; Ms. Karen Blackwell, FEDS Secretary, Mail Stop 77, Federal Reserve Board, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/feds/. PG 28. PR no charge. JE G21, G34. KW Loans. Banks. Mergers.
AB The paper uses data on the volume outstanding of small business loans from the midyear Call reports to summarize the nature of small business lending at banks that were involved in mergers between June 1993 and June 1996. Then, a model of gradual adjustment by the consolidated bank following the merger is estimated to determine whether the portfolio share of small business loans at the consolidated bank tends to move over time towards either the pre-merger share at the acquiring bank or the typical share at other banks of roughly the same size as the consolidated bank.

Walters, Chris F.
TI Are Differences in Firm Size Transitory or Permanent? AU Geroski, Paul A.; Walters, Chris F.; Urga, Giovanni.

Wang, Ruqu
TI Switching Costs in Frequently Repeated Games. AU Lipman, Barton L.; Wang, Ruqu.

Wang, Tan
TI Efficient Intertemporal Allocations with Recursive Utility. AU Dumas, Bernard; Uppal, Raman; Wang, Tan.

Warshawsky, Mark J.
TI New Evidence on the Money's Worth of Individual Annuities. AU Mitchell, Olivia S.; Poterba, James M.; Warshawsky, Mark J.

Watson, Mark W.
TI Asymptotically Median Unbiased Estimation of Coefficient Variance in a Time Varying Parameter Model. AU Stock, James H.; Watson, Mark W.

Weil, David, N.
TI The Genesis and Evolution of Social Security. AU Miron, Jeffrey A.; Weil, David, N.

Weiss, Thomas
TI Nutritional Status and Agricultural Surpluses in the Antebellum United States. AU Craig, Lee A.; Weiss, Thomas.

Werker, Bas J. M.
TI Testing for Mean-Variance Spanning with Short Sales Constraints and Transaction Costs: The Case of Emerging Markets. AU de Roon, Frans A.; Nijman, Theo E.; Werker, Bas J. M.

West, Kenneth D.
PD March 1998. TI Regression-Based Tests of Predictive Ability. AU West, Kenneth D.; McCracken, Michael W. AA West: University of Wisconsin and National Bureau of Economic Research. McCracken: University of Wisconsin. SR National Bureau of Economic Research Technical Paper: 226; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE C12, C32, C52, C53. KW Prediction Errors. Regression. Hypothesis Tests.
AB The authors develop regression-based tests of hypotheses about out of sample prediction errors. Representative tests include ones for zero mean and zero correlation between a prediction error and a vector of predictors. The relevant environments are ones in which predictions depend on estimated parameters. The authors show that standard regression statistics generally fail to account for error introduced by estimation of these parameters. They propose computationally convenient test statistics that properly account for such error. Simulations indicate that the procedures can work well in samples of size typically available, although there sometimes are substantial size distortions.

Wheelock, David C.
TI Was the Great Depression a Watershed for American Monetary Policy? AU Calomiris, Charles W.; Wheelock, David C.

Wieland, Volker
TI A Quantitative Exploration of the Opportunistic Approach to Disinflation. AU Orphanides, Athanasios; Small, David H.; Wieland, Volker; Wilcox, David W.

TI A Quantitative Exploration of the Opportunistic Approach to Disinflation. AU Orphanides, Athanasios; Small, David H.; Wieland, Volker; Wilcox, David W.

Wilcox, David W.
TI Alternative Strategies for Aggregating Prices in the CPI. AU Shapiro, Matthew D.; Wilcox, David W.

Willett, John B.
TI Does Acquisition of a GED Lead to More Training, Post-Secondary Education, and Military Service for School Dropouts? AU Murnane, Richard J.; Willett, John B.; Boudett, Kathryn Parker.

Williams III, Roberton C.
TI When Can Carbon Abatement Policies Increase Welfare? The Fundamental Role of Distorted Factor Markets. AU Parry, Ian W. H.; Williams III, Roberton C.; Goulder, Lawrence H.

Williams, John C.
TI The Evolution of Macro Model at the Federal Reserve Board. AU Brayton, Flint; Levin, Andrew T.; Tryon, Ralph; Williams, John C.

Williamson, Jeffrey G.
TI Were Trade and Factor Mobility Substitutes in History? AU O'Rourke, Kevin H.; Williamson, Jeffrey G.; Collins, William J.

Winkler, Bernhard
TI The Stability Pact: Safeguarding the Credibility of the European Central Bank. AU Artis, Michael J.; Winkler, Bernhard.

Winters, L. Alan
PD October 1997. TI Regional Integration as Diplomacy. AU Winters, L. Alan; Schiff, Maurice. AA The World Bank. SR Centre for Economic Policy Research, Discussion Paper: 1690; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 48. PR 5 pounds or $10.00. JE F02, F15. KW Regional Integration. Security. Diplomacy.
AB Security threats have moved neighboring countries to form regional integration arrangements (RIAs), including the European Coal and Steel Community (ECSC, 1951), the EEC (1957), and various RIAs among developing countries. This paper shows that an RIA - together with domestic taxes - is an optimal response to security concerns among neighboring countries. It shows that: i) the optimum external tariffs are likely to decline over time; ii) deep integration implies lower optimum external tariffs if it is exogenous, and higher optimum external tariffs before deep integration and lower ones thereafter if deep integration is endogenous; and iii) enlargement of bloc size has an ambiguous impact on external tariffs but raises welfare, and has some form of domino effect.

Wolf, Alison
PD March 1998. TI Basic Competence in Mathematics: Swedish and English 16-year-olds. AU Wolf, Alison; Steedman, Hilary. AA Wolf: Institute of Education. Steedman: Centre for Economic Performance and London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 385; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 30. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE I21, J24. KW Mathematics Achievement. Sweden. England. Assessment. Education.
AB The transition to mass participation in post-16 education, which had occurred considerably earlier in other European countries, has finally taken place in England. However, high drop-out and failure rates persist, particularly on vocational qualification routes. The authors' hypothesis is that an important factor is the lack of basic competence of lower-achieving English students in the key skills -- English language and Mathematics -- required for success in further study. Their research addresses the validity of the argument by investigating whether any significant difference can be detected between the

skills of English students entering post-compulsory education and those of students in countries where drop-out and failure rates are low. The country investigated in this study is Sweden. Some GCSE Math questions were incorporated into the national test taken by Swedish 16-year-olds at the end of compulsory schooling; and significant differences were found in the scores of the lower 40 per cent.

Wolf, Holger C.
PD February 1997. TI Patterns of Intra- and Inter-State Trade. AA New York University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5939; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 21. PR $5.00. JE F11, F12, F14, F15. O51. KW International Trade. Investment.
AB Recent studies suggest that intranational trade is "excessive" compared to international trade. An intuitive explanation for this home bias is provided by national trade barriers. A dataset of trade between U.S. states, however, reveals that home bias extends to subnational units. The data suggest three additional stylized facts. First, shipment distances are shorter for intermediate than for final goods. Second, states located close to each other tend to have similar production patterns. Third, trade flows are higher among states with similar production patterns. The stylized facts are consistent with a complementary explanation of home bias resulting from a spatial clustering of production driven by natural and created comparative advantage.

Wolinsky, Asher
PD October 1997. TI A Theory of the Firm with Non-Binding Employment Contracts. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1194; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 71. PR $3.00 domestic; $5.00 airmail; $2.00 Northwestern faculty/students; make check out to Northwestern University. JE C73, D21, J30, J50. KW Non-Binding Contracts. Dynamic Games. Bargaining. Wages.
AB This paper analyzes a dynamic model of a firm in which the wage of each employee is determined in separate bilateral negotiations with the firm. The contracts between the firm and its employees are non-binding in the sense that they can be repeatedly renegotiated to adjust to changing situations. The bargaining power of an employee stems from the threat of quitting that will deprive the firm of this worker's marginal contribution and will put the firm in a weaker position against the remaining workers. This threat is offset to some extent by the replacement opportunities that the firm has. The paper characterizes certain important equilibria: the profit maximizing, profit minimizing and stationary equilibria. The unique stationary equilibrium exhibits inefficient over-employment and is Pareto inferior. It confirms earlier results derived by Stole and Zwiebel (1996a, b) in the context of a static model.

Wolverton, Ann
TI The Case for a Two-Part Instrument: Presumptive Tax and Environmental Subsidy. AU Fullerton, Don; Wolverton,

Ann.

Woo, Wing Thye
TI Understanding China's Economic Performance.
AU Sachs, Jeffrey D.; Woo, Wing Thye.

Woodford, Michael
TI An Optimization-Based Econometric Framework for the Evaluation of Monetary Policy: Expanded Version.
AU Rotemberg, Julio J.; Woodford, Michael.

Wooton, Ian
PD June 1997. TI Regional Integration, Trade, and Migration: Are Demand Linkages Relevant in Europe? AU Wooton, Ian; Ludema, Rodney D. AA Wooton: University of Glasgow. Ludema: Georgetown University. SR Centre for Economic Policy Research, Discussion Paper: 1656; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 32. PR 5 pounds or $10.00. JE F12, F15, F22. KW Economic Integration. Economic Geography. Factor Mobility. International Trade.
AB We examine the consequences of increased economic integration between nations within a region. We adopt Krugman's economic-geography model in which demand linkages can generate agglomeration of manufacturing activity. Manufacturing labor is assumed to be imperfectly mobile between countries. This constrains the forces of agglomeration within the region and suggests that the model may be applicable to Europe. We show that trade liberalization may lead initially to partial agglomeration, then a re-industrialization of the periphery. This argues in favor of a sequential approach to integration, with trade barriers being eliminated prior to a reduction in impediments to factor mobility.

Wruck, Karen H.
TI A Clinical Exploration of Value Creation and Destruction in Acquisitions: Organizational Design, Incentives, and Internal Capital Markets. AU Kaplan, Steven N.; Mitchell, Mark L.; Wruck, Karen H.

Wyplosz, Charles
PD August 1997. TI EMU: Why and How It Might Happen. AA Graduate Institute of International Studies. SR Centre for Economic Policy Research, Discussion Paper: 1685; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 32. PR 5 pounds or $10.00. JE E58, E61, F36, F41. KW Europe. Monetary Union. Fiscal Restraints. Convergence. Capital Mobility.
AB This paper reviews the history, economic rationale and main components of the project of establishing a monetary union in Europe by 1999. The adoption of a single currency is shown to be the best available option following the liberalization of capital movements. Much of the institutional design (central bank independence and objectives, fiscal restraints) reflects Germany's fears of inflation as it is asked to give up its currency. The fiscal restraints are excessive, however, and a source of contractionary bias. The paper also presents the timetable of the final countdown.

TI The Real Exchange Rate in Transition Economies.

AU Grafe, Clemens; Wyplosz, Charles.

Xie, Danyang
TI On the Optimality of Interest Rate Smoothing.
AU Rebelo, Sergio; Xie, Danyang.

TI Beyond Balanced Growth. AU Rebelo, Sergio; Kongsamut, Piyabha; Xie, Danyang.

Yilankaya, Okan
TI Nash Equilibrium and the Evolution of Preferences.
AU Ely, Jeffrey C.; Yilankaya, Okan.

Yosha, Oved
PD July 1997. TI Income and Consumption Smoothing Among U.S. States: Regions or Clubs? AU Yosha, Oved; Sorensen, Bent E. AA Yosha: Tel Aviv University. Sorensen: Brown University. SR Centre for Economic Policy Research, Discussion Paper: 1670; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 44. PR 5 pounds or $10.00. JE D52, E21, E32, F36, G15, R50. KW Capital Markets. Consumption Smoothing. Credit Markets. Risk Sharing. Welfare Gains.
AB We measure the amount of income insurance and cross-sectional consumption smoothing (lending and borrowing) achieved within subgroups of states, such as regions or clubs, e.g. the club of rich states. We find that there is as much income insurance between, as well as within, regions. By contrast, consumption smoothing occurs mainly within regions but not between regions, suggesting that capital markets transcend regional barriers while credit markets are regional in their nature. Smoothing within the club of rich states is accomplished mainly via capital markets whereas consumption smoothing is dominant within the club of poor states. The fraction of a shock to gross state product smoothed by the federal tax-transfer system is the same for various regions and other clubs of states. We calculate the scope for consumption smoothing within various regions and clubs, finding that most gains from risk sharing can be achieved within US regions. Since a considerable fraction of shocks to gross state product are smoothed within regions, we conclude that existing markets achieve a substantial fraction of the potential welfare gains from interstate income and consumption smoothing. Nonetheless, non-negligible welfare gains may be obtained from further improvement of risk sharing institutions.

TI Stage Financing and the Role of Convertible Debt.
AU Cornelli, Francesca; Yosha, Oved.

Yu, Dahai
PD June 1998. TI Equilibrium Liquidity Premia. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 615; Margaret Gray, Division of International Finance, Mail Stop 24, Board of Governors of the Federal Reserve System, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 28. PR no charge. JE G12. KW Liquidity Premium. Bid-Ask Spread. General Equilibrium. Asset Prices.
AB This paper studies in a general framework the relative prices of perpetuities with identical dividends and different bid-ask spreads. It establishes four sets of conditions under which the liquidity premium is always positive (i.e., an asset with smaller spread always commands a higher price). To show that the liquidity premium is not necessarily positive, the paper presents two examples of general equilibrium in which the liquidity premium is sometimes negative. The paper also establishes four sets of conditions under which the price-spread relation is convex and uses results on asset price bubbles to establish liquidity premium bounds.

Zak, Paul J.
TI Time-To-Build and Cycles. AU Asea, Patrick K.; Zak, Paul J.

Zeckhauser, Richard J.
TI Reinsurance for Catastrophes and Cataclysms.
AU Cutler, David M.; Zeckhauser, Richard J.

TI Restraining the Leviathan: Property Tax Limitation in Massachusetts. AU Cutler, David M.; Elmendorf, Douglas W.; Zeckhauser, Richard J.

TI Horizon Length and Portfolio Risk. AU Gollier, Christian; Zeckhauser, Richard J.

Zelder, Martin
PD November 1997. TI Rotten Altruists, Saccharine Altruists, and Saints: Altruism and Social Optimality. AA Michigan State University and Australian National University. SR University of Western Ontario, Papers in Political Economy: 87; Department of Economics, University of Western Ontario, London, Ontario N6A 5C2, Canada. PG 30. PR no charge. JE D61, D63, D64. KW Altruism. Social Welfare. Pareto Optimality.
AB Do altruists who can transfer resources to their beneficiaries according to various mechanisms make socially-optimal decisions? The answer has been the subject of some disagreement. Depending on the formulation of the model, particularly with regard to the description of altruism, economists have in some cases concluded that altruism does generate a social optimum and in other cases that it does not. This paper thus attempts to summarize these varied conclusions and to articulate a series of new results on altruism. One major new result, robust to a variety of different specifications of altruism, is labeled the "rotten altruist" theorem: privately optimal resource allocations are not generally Bergson-Samuelson social-welfare-maximizing, although they are Pareto-optimal. Attainment of Pareto-optimality will be seen, however, to require that society, paradoxically, places no independent weight on the preferences of the altruist's beneficiary.

Zhang, Lei
TI Shareholders and Stakeholders: Human Capital and Industry Equilibrium. AU Miller, Marcus; Zhang, Lei; Ippolito, Roberto.

Zhang, Wenda
TI On Identifying the Core of EMU: An Exploration of Some Empirical Criteria. AU Artis, Michael J.; Zhang, Wenda.

Zhang, Xuechun
TI Premiums in Private Versus Public Bank Branch Sales.
AU Berkovec, James A.; Mingo, John J.; Zhang, Xuechun.

Zhou, Chunsheng

AB Evaluating default correlations and the probabilities of multiple defaults is an important task in credit analysis and risk management, but it has never been an easy one because default correlations cannot be measured directly. This paper provides, for the first time, an analytical formula for calculating default correlations based on a first-passage-time model which can be easily implemented and conveniently used in a variety of financial applications. The result of this paper also provides a theoretical justification for many empirical results found in the literature and increases our understanding of the important features of default correlations.

Zoega, Gylfi