ABSTRACTS OF WORKING PAPERS IN ECONOMICS

This section contains abstracts and complete bibliographic information for current working papers, listed alphabetically by primary author. Brief entries appear for secondary authors, cross-referenced to the primary author. The AWPE Database is available as part of EconLit, the American Economic Association's on-line database and CD-ROM. For more information please contact Cambridge University Press (Call 212/924-3900).

Abowd, John M.
PD December 1997. **TI** The Entry and Exit of Workers and the Growth of Employment: An Analysis of French Establishments. **AU** Abowd, John M.; Kramarz, Francis; Corbel, Patrick. **AA** Abowd: Cornell University. Kramarz and Corbel: INSEE. **SR** Centre for Economic Policy Research Discussion Paper: 1765; 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** D24, J23, J63, J64. **KW** Job Flows. Worker Flows. Hiring. Separation. France.

AB Using data that permit a distinction between flows of workers, directly measured, and job creation and destruction, again, directly measured, we develop employment and job flow statistics for a representative sample of French establishments for 1987 to 1990. Annual job creation can be characterized as hiring three persons and separating two for each job created in a given year. Annual job destruction can be characterized as hiring one person and separating two for each job destroyed in a given year. When an establishment is changing employment, the adjustment is made primarily by reducing entry and not by changing the separation rates. There is considerable simultaneous hiring and separation, even controlling for skill group. Two-thirds of all hiring is on short-term contracts and more than half of separations are due to the ending of these short-term contracts.

Abrams, Richard K.
PD March 1998. **TI** The Prudential Regulation and Management of Foreign Exchange Risk. **AU** Abrams, Richard K.; Beato, Paulina. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/98/37; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 33. **PR** not available. **JE** F31, G28. **KW** Prudential Regulation. Foreign Exchange. Risk. Foreign Currency. Banking Supervision.

AB This paper examines issues in the prudential management and regulation of foreign exchange risk. It begins with measurement issues, notably converting foreign currency items into domestic currency terms, and calculating foreign exchange positions. The focus then shifts to managing foreign exchange risks. Although the key to effective management lies in the bank's reporting and internal control systems, regulators frequently seek to limit such risks directly. This usually involves limiting the overall open position in terms of bank capital or requiring that capital be set aside against such risks.

Acemoglu, Daron
PD March 1998. **TI** Why Did the West Extend the Franchise? Democracy, Inequality and Growth in Historical Perspective. **AU** Acemoglu, Daron; Robinson, James A. **AA** Acemoglu: Massachusetts Institute of Technology. Robinson: University of Southern California. **SR** Centre for Economic Policy Research Discussion Paper: 1797; 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** D72, O15, P16. **KW** Democracy. Enfranchisement. Growth. Inequality. Redistribution.

AB During the nineteenth century most Western societies extended the franchise, a decision which led to unprecedented redistributive programs. We argue that these political reforms can be viewed as strategic decisions by political elites, to prevent widespread social unrest and revolution. Political transition, rather than redistribution under existing political institutions, occurs because current transfers do not ensure future transfers, while the extension of the franchise changes the future political equilibrium and acts as a commitment to future redistribution. Our theory offers a novel explanation for the Kuznets curve, whereby the fall in inequality follows redistribution due to democratization. We characterize the conditions under which an economy experiences the development path associated with the Kuznets curve, as opposed to two non-democratic paths: an "autocratic disaster"; with high inequality and low output; and an 'East Asian Miracle', with low inequality and high output.

Agenor, Pierre-Richard
PD December 1997. **TI** Money, Wages and Inflation in Middle-Income Developing Countries. **AU** Agenor, Pierre-Richard; Hoffmaister, Alexander W. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/174; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 38. **PR** not available. **JE** E24, E31, F31. **KW** Inflation Determinants. Generalized VAR.

AB This paper examines the short-run links between money growth, exchange rate depreciation, nominal wage growth, the output gap, and inflation in Chile, Korea, Mexico, and Turkey, using a generalized vector autoregression analysis. Nominal historical wage shocks are shown to have an important effect on movements in inflation only in Mexico. Generalized impulse response functions show that a positive historical shock to nominal wage growth generates a transitory but significant reduction in output. Inflation increases in all countries, particularly Mexico. A positive shock to nominal money growth raises real cash balances on impact and exerts an expansionary effect on output, despite an increase in real wages.

Aguirregabiria, Victor

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

AB This paper considers the estimation of dynamic structural models where the decision variables are censored. We present and discuss several econometric issues and estimation methods under alternative stochastic structures of the unobservables, different potential sources of censoring, and different characteristics of the dataset (e.g., temporal dimension, frequency of corner solutions, or distribution of duration spells between two consecutive interior solutions). We use a labor demand model with kinked and lump-sum hiring and firing costs to illustrate the econometric problems and estimation methods.

Aiyagari, S. Rao

AB This paper is motivated by empirical observations on the comovements of currency velocity, inflation, and the relative size of the credit services sector. We document these comovements and incorporate into a monetary growth model a credit services sector that provides services that help people economize on money. Our model makes two new contributions. First, we show that direct evidence on the appropriately defined credit service sector for the United States is consistent with the welfare cost measured using an estimated money demand schedule. Second, we provide welfare cost of inflation estimates that have some new features.

Al-Atrash, Hassan

Al-Karasneh, Ibrahim

AB This paper evaluates the impact on the performance (profitability) of the banking system in Jordan of aspects of market structure. It considers the structure-conduct-performance and the efficient market hypotheses. The econometric findings contrast with the prevalent view in the literature that the concentration variable only has a significant impact on performance when the market share is excluded from the estimated relationship. Using principal components/factor analysis and dummy variables in the econometrics based on panel data it was discovered that the sample of banks was not homogeneous. In effect, the commercial banks had to be considered separately from the investment banks. The econometrics then confirmed that both market share and concentration were important determinants of performance. Consequently, there might be large increases in profits following mergers: the current increase in concentration in evidence in the Jordanian banking sector will not necessarily lead to less competition and to lower profits.

Albano, Gian Luigi

JE C72, D82, L15. KW Information Revelation. Disclosure Rule. Certification. Quality. Monopoly.
AB If buyers do not observe the quality of a product and production of quality is costly, market allocations can be very inefficient. Certification intermediaries are institutions that provide information about quality to buyers. The amount of information in the market determines the incentives that producers have to provide high quality goods. In this paper, we model information revelation as a strategic variable of intermediaries. The amount of disclosed information is shown to deeply influence both the intermediary's profits and the distribution of quality produced in equilibrium. We show that a monopoly intermediary will provide noisy signals of quality and that the quality produced in equilibrium is the same as the one that would be chosen by a monopsonistic buyer who optimally designs a mechanism. Efficiency is increased by the intermediary but less quality is produced in equilibrium than under complete information.

Alesina, Alberto
PD April 1997. TI Public Goods and Ethnic Divisions. AU Alesina, Alberto; Baqir, Reza; Easterly, William. AA Alesina: Harvard University and National Bureau of Economic Research. Baqir: University of California, Berkeley. Easterly: The World Bank. SR National Bureau of Economic Research Working Paper: 6009; National Bureau of Economic Research. 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 31. PR $5.00. JE H41, H72, I38, J15, R51. KW Public Economics. Ethnic Fragmentation. Welfare. Cities. Minorities.
AB We present a model that links heterogeneity of preferences across ethnic groups in a city to the amount and type of public good the city supplies. We test the implications of the model with three related datasets: U.S. cities, U.S metropolitan areas, and U.S. urban counties. Results show that productive public goods -- education, roads, libraries, sewers and trash pickup -- in U.S. cities (metro areas/urban counties) are inversely related to the city's (metro area's/county's) ethnic fragmentation, even after controlling for other socioeconomic and demographic determinants. Ethnic fragmentation is negatively related to the share of local spending on welfare. The results are mainly driven by observations in which majority whites are reacting to varying sizes of minority groups. We conclude that ethnic conflict is an important determinant of local public finances.

PD May 1997. TI Openness, Country Size and the Government. AU Alesina, Alberto; Wacziarg, Romain. AA Alesina: Harvard University and National Bureau of Economic Research. Wacziarg: Harvard University. SR National Bureau of Economic Research Working Paper: 6024; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE E63, F13, F41, H11, O23. KW Economic Fluctuations. Growth. Monetary Economics. Public Economics. Country Size.
AB This paper shows that smaller countries have larger public sectors as a share of GDP, and are also more open to trade. These empirical observations are consistent with recent theoretical models explaining country formation and break up.

Alexander, Barbara
PD June 1997. TI The Legacy of New Deal Regulation: Why the AAA Succeeded, While the NRA Failed.

AU Alexander, Barbara; Libecap, Gary D. AA Alexander: Wellesley College. Libecap: University of Arizona and National Bureau of Economic Research. SR University of Arizona Economics Discussion Paper: 97/06; Patricia Blassingame, Discussion Paper Coordinator, University of Arizona, Department of Economics, McClelland Hall, Room 401, P.O. Box 210108, Tucson, AZ 85721-0108. PG 63. PR $2.00 U.S. and Canada; $3.00 Overseas by air. JE D23, D72, K23, L12, N42. KW New Deal. AAA. NRA. AB none available.

Ali Khan, M.
PD May 1997. TI On the Decomposition and Characterization of Risk. AU Ali Khan, M.; Sun, Yeneng. AA Ali Khan: The Johns Hopkins University. Sun: National University of Singapore. SR Universite Catholique de Louvain CORE Discussion Paper: 9738; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 12. PR $100 per year. JE C60, D81. KW Risk. Uncertainty. Decision Making.
AB The authors show that the main theorem in Al-Najjar's 1995 Econometrica paper is false. They provide additional references for the residual implications that are valid, but point out that these standard implications are incapable of bearing the interpretative weight that Al- Najjar places on them.

Allen, Beth
PD August 1998. TI The Existence of Rational Expectations Equilibrium: A Retrospective. AU Allen, Beth; Jordan, James S. AA Allen: University of Minnesota and Federal Reserve Bank of Minneapolis. Jordan: University of Minnesota. SR Federal Reserve Bank of Minneapolis Staff Report: 252; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. PG 22. PR no charge. JE D82, D51, D83, D84, G14. KW Rational Expectations. Market Mechanism. Resource Allocation. General Equilibrium. Genericity. Full Revelation.
AB This paper provides a selective review of theoretical research on the consistency of rational expectations equilibrium and its properties in microeconomic models. The general equilibrium framework is emphasized throughout the paper. After defining rational expectations equilibrium for a pure exchange economy, the paper presents a simple counterexample to illustrate that rational expectations equilibria need not exist. Results are summarized for the generic existence of fully revealing rational expectations equilibria in smooth economies satisfying additional dimensionality assumptions. Then the rational expectations equilibrium existence problem is related to earlier analysis of informationally decentralized allocation mechanisms. Next the efficiency properties of rational expectations equilibrium allocations are examined. Finally, the possibilities for partially revealing rational expectations equilibria are discussed.

Allen, Franklin
PD September 1998. TI Finance Applications of Game Theory. AU Allen, Franklin; Morris, Stephen. AA Allen: University of Pennsylvania. Morris: Yale University. SR Yale Cowles Foundation Discussion Paper: 1195; Yale University, Cowles Foundation Library, Box 208281, New

Haven, CT 06520. **PG** 46. **PR** no charge up to 3 papers; $3.00 domestic; 4.00 International. **JE** C70, G10. **KW** Game Theory. Finance.
AB Traditional finance theory based on the assumptions of symmetric information and perfect and competitive markets has provided many important insights. These include the Modigliani and Miller Theorems, the CAPM, the Efficient Markets Hypothesis and continuous time finance. However, many empirical phenomena are difficult to reconcile with this traditional framework. Game theoretic techniques have allowed insights into a number of these. Many puzzles remain. This paper argues that recent advances in game theory concerned with higher order beliefs, informational cascades and heterogeneous prior beliefs have the potential to provide insights into some of these remaining puzzles.

Alonso, Francisco

PD October 1997. **TI** How Informative are Financial Asset Prices in Spain? **AU** Alonso, Francisco; Ayuso, Juan; Pages, Jorge Martinez. **AA** Banco de Espana. **SR** Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9803; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid, Spain. Website: www.bde.es. **PG** 53. **PR** Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** E31, E32, E58, G12, G14. **KW** Asset Prices. Central Banks. Information. Spain. Business Cycles.
AB This paper analyzes the informational content of financial prices in Spain, mainly from the viewpoint of a central bank. In particular, the authors examine the informational content of domestic yields and yield spreads, foreign-domestic spreads, credit quality spreads, stock prices and exchange rates on the inflation rate, the 3-month interest rate and output. Three alternative empirical approaches are considered. First, the authors compare the out-of-sample performance of equations containing each financial indicator with a simple univariate equation containing only lagged values of the dependent variable. Next, they consider financial prices as "qualitative" indicators and estimate Probit models to forecast inflationary upturns, output slowdowns and monetary policy tightenings. Finally, they analyze the possibility of using financial prices as expectation indicators, independently of their ability as predictors. According to our results, none of the financial indicators considered seems to hold a stable empirical relationship with any of the fundamentals.

Alonso-Borrego, Cesar

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

Alston, Lee J.

PD April 1997. **TI** Competing Claims to Land: The Sources of Violent Conflict in the Brazilian Amazon. **AU** Alston, Lee J.; Fuller, Jeffrey R.; Libecap, Gary D.; Mueller Bernardo. **AA** Alston: University of Illinois and National Bureau of Economic Research. Fuller: University of Arizona. Libecap: University of Arizona and National Bureau of Economic Research. Mueller: Universidade de Brasilia. **SR** University of Arizona Economics Discussion Paper: 97/05; Patricia Blassingame, Discussion Paper Coordinator, University of Arizona, Department of Economics, McClelland

Hall, Room 401, P.O. Box 210108, Tucson, AZ 85721-0108. **PG** 33. **PR** $2.00 U.S. and Canada; $3.00 Overseas by air. **JE** D23, D72, O13, Q15. **KW** Competing Claims. Violent Conflict. Amazon.
AB In this paper, we examine the determinants of violent conflict over land in the Brazilian Amazon. The settlement process and the legal bases for conflicting claims to land are described. Although civil law guarantees the sanctity of title, the Brazilian Constitution adds a beneficial use criterion as a condition for title enforcement. This provision is part of a land reform or redistribution effort. Forested lands on large private farms do no meet this criterion and hence, are vulnerable to invasion by squatters. An analytical framework is provided to generate hypotheses for testing. Using data from the Brazilian census, the Pastoral Land Commission, and a survey of contested areas in the state of Para we examine the factors that lead to the expropriation of private lands and the characteristics of regions where violence predominates. The implications for economic growth, as well as for the maintenance of rainforests are discussed. Our empirical results indicate that a greater policy emphasis on land reform in Brazil through expropriation to reduce violent conflict, is likely to have the unanticipated effect of increasing violence. The results of the paper are suggestive not only for Brazil, but for elsewhere in Latin America where there is tension between the goals of secure property rights and wealth redistribution.

Altonji, Joseph G.

PD April 1997. **TI** Do Wages Rise With Job Seniority? A Reassessment. **AU** Altonji, Joseph G.; Williams, Nicolas. **AA** Altonji: Northwestern University and National Bureau of Economic Research. Williams: University of Cincinnati. **SR** National Bureau of Economic Research Working Paper: 6010; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 34. **PR** $5.00. **JE** J24, J31, J41. **KW** Labor Studies. Seniority. Wages. Job Tenure.
AB We provide new estimates of the return of job seniority using data similar to that used by Abraham and Farber (1987), Altonji and Shakotko (1987) and Topel (1991) as well as a new PSID sample. Topel's use of a wage and a tenure that refer to different years, his use of the Current Population Survey to detrend the PSID, and differences between Altonji and Shakotko's estimator and Topel's estimator explain the fact that Topel obtains much larger estimates. The evidence from the data used by AS and Topel points to an effect of ten years of tenure on the log wage equal to .11, which is above AS's preferred estimate of .066 but far below Topel's estimate. However, this estimate is probably biased upward by the wage measure used in all three studies. We also obtain a modest estimate of the return to seniority using data for 1983-1991.

Amir, Rabah

PD April 1997. **TI** One-Way Spillovers, Endogenous Innovator/Imitator Roles and Research Joint Ventures. **AU** Amir, Rabah; Wooders, John C. **AA** Amir: Wissenschaftszentrum Berlin, Berlin. Wooders: University of Arizona. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9727; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 35. **PR** $100 per year. **JE** C72, L13, O31, O32. **KW** One-Way Spillovers. Joint

Ventures. Submodularity. Research and Development. Oligopoly.

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

Andersen, Erling D.

AB The purpose of this work is to present the APOS linear programming (LP) solver intended for solution of large-scale sparse LP problems. The solver is based on the homogeneous interior-point algorithm which in contrast to the primal-dual algorithm detects a possible primal or dual infeasibility reliably. It employs advanced (parallelized) linear algebra, it handles dense columns in the constraint matrix efficiently, and it has a basis identification procedure. Moreover, recently the solver has been incorporated into the commercially available XPRESS-MP^1 software. This paper discusses in detail the algorithm and linear algebra employed by the APOS LP solver. Extensive computational results are reported. These results include comparative results for the XPRESS- MP simplex and barrier code and the freely available BPMPD code developed by Cs. Meszaros. Finally, computational results are presented to demonstrate the possible speed-up, when using a parallelized version of the APOS LP solver on a Silicon Graphics Challenge computer.

Andersen, Knud D.

Andersen, Torben G.

AB Volatility permeates modern financial theories and decision making processes. As such, accurate measures and good forecasts of future volatility are critical for the implementation and evaluation of asset pricing theories. In response to this, a voluminous literature has emerged for modeling the temporal dependencies in financial market volatility at the daily and lower frequencies using ARCH and stochastic volatility type models. Most of these studies find highly significant in-sample parameter estimates and pronounced intertemporal volatility persistence. Meanwhile, when judged by standard forecast evaluation criteria, based on the squared or absolute returns over daily or longer forecast horizons, ARCH models provide seemingly poor volatility forecasts. The present paper demonstrates that ARCH models, contrary to the above contention, produce strikingly accurate interdaily forecasts for the latent volatility factor that is relevant for most financial applications.

Anderson, Kym

AB East Asia has rapidly become the third center of gravity for global economic activity. North America is relatively well integrated with East Asia, but Europe is not. This paper explores the extent to which economic growth and trade policy developments over the next decade will strengthen European-East Asian economic integration, and what scope there is to facilitate that set of bilateral relationships. Use is made of a modified version of the global CGE model known as GTAP to project the world economy to 2010 under various scenarios including Uruguay Round implementation, a transatlantic free trade agreement, APEC liberalization, and a new WTO multilateral round. The bilateral trade consequences of economic growth and Uruguay Round implementation highlight the fact that as East Asia's relative importance in the world economy grows, so too does its importance to Europe. The relative importance of Europe to East Asia is projected to grow very little.

Andres, Javier

AB As the Spanish economy gets more integrated in international markets, competitiveness becomes a key determinant of the monetary transmission. In this paper we trace out the dynamic response of prices, output and the exchange rate following a monetary policy shock. We estimate

a structural VAR model whose identification scheme is based on the long run properties common to a large class of models. The results suggest that a small model with efficient asset markets plus nominal inertia and long run monetary neutrality, captures the essential features of the monetary transmission mechanism in Spain. The interest rate shock is well identified and the exchange rate overshoots its long run value. There are no signs of liquidity puzzle nor of price puzzle or exchange rate puzzle either.

PD March 1998. TI Disinflation, Output and Unemployment: The Case of Spain. AU Andres, Javier; Hernando, Ignacio; Lopez-Salido, J. David. AA Andres: Banco de Espana and Universidad de Valencia. Hernando and Lopez-Salido: Banco de Espana. SR Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9806; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid, Spain. Website: www.bde.es. PG 21. PR Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. JE E24, E31, O40. KW Disinflation. Unemployment. Vector Autoregressions. Spain. Growth.

AB Taking into account two salient Spanish stylized facts, namely, a persistent disinflationary process and hysteresis in the unemployment, this paper tries to answer the following question: Is a nominal permanent disinflation compatible with short-run unemployment costs but also with long-run output benefits. The answer to this question crucially depends on the way we identify such nominal shocks. When monetary shocks are identified as those that do not generate a long-run trade-off between inflation and unemployment (and inflation in the long-run is primarily, although not exclusively, a monetary phenomenon), the answer to the question is yes. The reason is that, although in the data there exists a permanent trade-off between inflation and unemployment, its origin is real.

Anstreicher, Kurt M.

PD April 1997. TI Using Continuous Nonlinear Relaxations to Solve Constrained Maximum- Entrophy Sampling Problems. AU Anstreicher, Kurt M.; Fampa, Marcia; Lee, Jon; Williams, Joy. AA Anstreicher: University of Iowa. Fampa: Federal University of Rio de Janeiro. Lee and Williams: University of Kentucky. SR Universite Catholique de Louvain CORE Discussion Paper: 9729; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 26. PR $100 per year. JE C61, C63, C69. KW Nonlinear Relaxation. Maximum Entropy. Sampling.

AB We consider a new nonlinear relaxation for the Constrained Maximum- Entropy Sampling Problem -- the problem of choosing the s x s principal submatrix with maximal determinant from a given n x n positive definite matrix, subject to linear constraints. We implement a branch-and-bound algorithm for the problem, using the new relaxation. The performance on test problems is far superior to a previous implementation using an eigenvalue-based relaxation. A parallel implementation of the algorithm exhibits approximately linear speed-up for up to 8 processors, and has successfully solved problem instances which were heretofore intractable.

PD May 1997. TI Towards a Practical Volumetric Cutting Plane Method for Convex Programming.

AA University of Iowa. SR Universite Catholique de Louvain CORE Discussion Paper: 9740; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 19. PR $100 per year. JE C61. KW Volumetric Cutting Plane. Convex Programming. Separation Oracles.

AB The authors consider the volumetric cutting plane method for finding a point in a convex set that is characterized by a C a subset of R superscript n separation oracle. They prove polynomiality of the algorithm with each added cut placed directly through the current point, and show that this "central cut" version of the method can be implemented using no more than 25n constraints at any time.

PD June 1997. TI Ellipsoidal Approximations of Convex Sets Based on the Volumetric Barrier. AA University of Iowa. SR Universite Catholique de Louvain CORE Discussion Paper: 9745; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 12. PR $100 per year. JE C61. KW Separation Oracles. Volumetric Cutting Plane. Convex Sets. Ellipsoidal Approximations.

AB Let C a subset of R dimension n be a convex set. The authors assume that the absolute value of x subscript infinity is less than or equal to 1 for all x an element of C, and that C contains a ball of radius $1/R$. For x an element of R dimension n, and B an n x n positive definite matrix, let $E(x, B, r)$ = the set of y such that (y-x) transpose B(y-x) is less than or equal to r squared. A beta-rounding of C is an ellipsoid $E(x, B, r)$ such that $E(x, B, r/beta)$ is a subset of C which is a subset of $E(x, B, r)$. In the case that C is characterized by a separation oracle, it is well known that an O(n to the 3/2)-rounding of C can be obtained using the shallow cut ellipsoid method in O(n cubed ln(nR)) oracle calls. The authors show that a modification of the volumetric cutting plane method obtains an O(n to the 3/2)-rounding of C in O(n squared ln(nR)) oracle calls.

PD June 1997. TI Linear Programming in O((n cubed/ ln(n)) L) Operations. AA University of Iowa. SR Universite Catholique de Louvain CORE Discussion Paper: 9746; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 11. PR $100 per year. JE C61. KW Linear Programming. Partial Updating. Conjugate Gradient.

AB The author shows that the complexity to solve linear programming problems, using standard linear algebra, can be reduced to O([n cubed/ ln(n)]L) operations, where n is the number of variables in a standard form problem with integer data of bit size L. The author's technique combines partial updating with a preconditioned conjugate gradient method, in a scheme first suggested by Nesterov and Nemirovskii.

Ascari, Guido

TI Staggered Wages and Disinflation Dynamics: What Can More Microfoundations Tell Us? AU Rankin, Neil; Ascari, Guido.

Atkeson, Andrew

PD March 1997. TI Models of Energy Use: Putty-Putty vs. Putty-Clay. AU Atkeson, Andrew; Kehoe, Patrick J.

AA Atkeson: University of Pennsylvania and National Bureau of Economic Research. Kehoe: Federal Reserve Bank of Minneapolis, University of Pennsylvania and National Bureau of Economic Research. SR Federal Reserve Bank of Minneapolis Staff Report: 230; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. PG 23. PR no charge. JE E32, Q40. KW Energy. Putty-Clay.
AB Energy use is inelastic in time-series data, but elastic in international cross-section data. Two models of energy use reproduce these elasticity's: a putty-putty model with adjustment costs developed by Pindyck and Rotemberg (1983) and a putty-clay model. In the Pindyck- Rotemberg model, capital and energy are highly complementary in both the short run and the long run. In the putty-clay model, capital and energy are complementary in the short run, but substitutable in the long run. We highlight the differences in the cross-section implications of the models by considering the effect of an energy tax on output in both models. In the putty-putty model, an energy tax that doubles the price of energy leads to a fall in output in the long run of 33%. In contrast, the same tax in the putty-clay model leads to a fall in output of only 5.3%.

PD October 1998. TI Paths of Development for Early- and Late-Bloomers. AU Atkeson, Andrew; Kehoe, Patrick J. AA Atkeson: University of Minnesota and Federal Reserve Bank. Kehoe: University of Pennsylvania and Federal Reserve Bank of Minneapolis. SR Federal Reserve Bank of Minneapolis Staff Report: 256; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. PG 12. PR no charge. JE F11, O11, O41. KW Two Sector Growth Models. Convergence Trade and Growth.
AB We show that the timing of a country's development relative to the rest of the world affects the path of the country's development. A country that begins the development process later than most of the rest of the world -- a late-bloomer -- ends up with a permanently lower level of income than the early-blooming countries that developed earlier. This is true even though the late-bloomer has the same preferences, technology, and initial capital stock that the early- bloomers had when they started the process of development. This result stands in stark contrast to that of the standard one-sector growth model in which identical countries converge to a unique steady state, regardless of when they start to develop.

Aylward, Lynn
PD March 1998. TI An Econometric Analysis of Countries' Repayment Performance to the International Monetary Fund. AU Aylward, Lynn; Thorne, Rupert. AA Aylward: International Monetary Fund. Thorne: Bank of England and International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/32; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 47. PR not available. JE F33, F34. KW Repayment Performance. External Debt.
AB While the literature on external debt repayment performance by sovereign debtors is extensive, repayment performance vis-a-vis the International Monetary Fund has not been dealt with separately. Given differences between the Fund and other providers of financial resources, this paper considers whether it is possible to distinguish through logit analysis

between the countries that make timely repayments to the Fund and those that become overdue. The paper finds that the inclusion of Fund-specific financial variables and a small number of macroeconomic variables yields a highly significant econometric model of the probability of a country incurring Fund arrears.

Ayuso, Juan
TI How Informative are Financial Asset Prices in Spain? AU Alonso, Francisco; Ayuso, Juan; Pages, Jorge Martinez.

PD July 1998. TI Una Clasificacion Por Riesgo de los Fondos de Inversion Espanoles. AU Ayuso, Juan; Blanco, Roberto; Sanchis, Alicia. AA Banco de Espana. SR Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9812; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid, Spain. Website: www.bde.es. PG 28. PR Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. JE G11, G13, G30. KW Mutual Funds. Risk Classification. Portfolio Composition.
AB This document shows that the current mutual fund classifications -- based on the composition of its portfolios -- do not allow the potential holders to satisfactorily identify their risk level, and so it puts forward an alternative classification based on the comparison of the volatility of the liquidation value of the funds' shares with the volatility of a set of reference financial assets. The comparison of the proposed classification with the current ones shows the superiority of the former, above all in allocating risk levels to bond mutual funds.

PD July 1998. TI A Switching Regime Model for the Spanish Inflation: 1962-1997. AU Ayuso, Juan; Kaminsky, Graciela L.; Lopez-Salido, J. David. AA Ayuso and Lopez-Salido: Banco de Espana. Kaminsky: Board of Governors of the Federal Reserve System. SR Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9814; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid, Spain. Website: www.bde.es. PG 10. PR Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. JE C39, E31, E42, E52, F33. KW Inflation. Expectations. Switching Regime. Monetary Policy. Spain.
AB During the 1970's and early 1980's, Spain suffered high rates of inflation but inflation declined and by 1997 inflation has fallen to approximately 2 percent. To fight inflation, Spain implemented austere monetary programs, joined the EMS in 1989, enacted central bank autonomy in 1994, and introduced inflation targets in January 1995. Certainly, these and other policies are in part responsible for the decline in inflation. However, it is unclear the extent of the contribution of each policy. This paper takes the first steps in capturing the magnitude of the effects of the different policies on inflation. It estimates a switching-regime model of inflation that allows for the endogenous identification of the dates of the switching from one regime to another. This possibility of dating the start of the different inflation regimes will allow us to link the evolution of inflation regimes to the timing of implementation of the anti-inflationary strategies.

Azariadis, Costas
PD October 1998. TI Complex Eigenvalues and Trend-Reverting Fluctuations. AU Azariadis, Costas; Bullard,

to prevent environmental damage. However, his argument hinges on the assumption that the lender has no bargaining power and makes 0-profits in a contract. In this paper the authors study all possible optimal contracts between the borrower and the lender. In particular they study the case where the lender has all the bargaining power. They use the weighted Nash-bargaining solution to handle both cases in a unified framework. The results for the case where the lender has a high bargaining power differ substantially from Pitchford's findings. Then a joint liability rule is socially preferable to single liability of the firm. In fact, often it is optimal to require liability above the actual costs of damage or to set it so high that it extracts all potential profits from the project.

PD June 1997. **TI** On the Interpretation of Evolutionarily Stable Sets. **AU** Balkenborg, Dieter; Schlag, Karl H. **AA** Balkenborg: University of Southampton. Schlag: Wirtschaftstheoretische Abteilung III, Universitat Bonn. **SR** University of Southampton Discussion Papers in Economics and Econometrics: 9710; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton SO17 1BJ, England. Website: www.soton.as.uk/discp.html. **PG** 22. **PR** on application. **JE** C72, C73. **KW** Evolutionary Stability. Strategy Sets. Game Theory.
AB The authors introduce notions of evolutionary stability for sets of strategies based on: After every sufficiently small mutation of a population playing a single strategy in the set: a) No single mutant strategy can spread. b) A single mutant strategy not in the set will be driven out. Depending on the precise interpretation of "a sufficiently small mutation" the authors distinguish "simple ES sets", "pointwise uniform ES sets" and "uniform ES set". In contrast to the original definition of an ES set by Thomas (1985d) the authors' definitions do not require the sets to be closed. They show: 1) A uniform ES set is always an ES set as defined by Thomas. 2) For analytic fitness functions, and hence for all symmetric normal form games, the notions of pointwise uniform ES set and ES set coincide. 3) All four definitions of evolutionary stability for sets coincide in symmetric bimatrix games.

Banks, Bruce A.
TI Evidence from Patents and Patent Citations on the Impact of NASA and Other Federal Labs on Commercial Innovation. **AU** Jaffe, Adam B.; Fogarty, Michael S.; Banks, Bruce A.

Baqir, Reza
TI Public Goods and Ethnic Divisions. **AU** Alesina, Alberto; Baqir, Reza; Easterly, William.

Barrett, Richard
PD June 1997. **TI** The Efficient Sharing of an Uncertain Natural Resource: A Contract Theory Approach. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics Discussion Paper: 97/08; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. Website: www.bham.ac.uk/economics. **PG** 19. **PR** 2 pounds; no charge to academics. **JE** D82, L14, Q29, Q39. **KW** Contracts. Natural Resources. Private Information. Sharing.
AB The paper examines the efficient sharing between two parties of a natural resource, such as water from a river or a reserve of natural gas, when information on the benefits which

will accrue is private. In order to maximize these benefits the two parties agree on a contract. In the paper various forms of contract are considered, the form adopted determining how the division of the natural resource between the parties is controlled. The main object of the paper is to investigate efficient pricing and the conditions under which each of these forms is best. The theory is illustrated by an application to the Lesotho Highlands Water Project.

Barros, Pedro Pita
PD December 1997. **TI** Approval Rules for Sequential Horizontal Mergers. **AA** Universidade Nova de Lisboa. **SR** Centre for Economic Policy Research Discussion Paper: 1764; 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** D43, G34, L41, L43. **KW** Mergers. Approval Rules. Antitrust Policy.
AB Merger approval decisions lie at the heart of competition policies. Farrell and Shapiro (1990) presented a model stating safe harbor rules for merger approval. In the presence of sequential mergers, however, computation of the sufficient external effect criterion for each merger may not be possible as the second merger will be influenced by the equilibrium emerging from the first. If the mergers are close enough in time, the second merger must be evaluated without the knowledge of the equilibrium point after the first merger. Two alternatives are proposed: joint merger evaluation and independent merger evaluation. The decision errors (too many approvals or rejections) are identified for each of the alternative rules. It is shown that joint merger evaluations generate too many rejections of mergers and independent evaluations lead to too many approvals.

Bauwens, Luc
PD February 1997. **TI** A Gibbs Sampling Approach to Cointegration. **AU** Bauwens, Luc; Giot, Pierre. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9716; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 24. **PR** $100 per year. **JE** C32, C51, F10, F41. **KW** Gibbs Sampling. Cointegration. Vector Autoregression. Spectral Analysis. Imports.
AB This paper reviews the application of Gibbs sampling to a cointegrated VAR system. Aggregate imports and import prices for Belgium are modeled using two cointegrating relations. Gibbs sampling techniques are used to estimate from a Bayesian perspective the cointegrating relations and their weights in the VAR system. Extensive use of spectral analysis is made to get insight into convergence issues.

Beato, Paulina
TI The Prudential Regulation and Management of Foreign Exchange Risk. **AU** Abrams, Richard K.; Beato, Paulina.

Bekaert, Geert
PD April 1997. **TI** Asymmetric Volatility and Risk in Equity Markets. **AU** Bekaert, Geert; Wu, Guojun. **AA** Bekaert: Stanford University and National Bureau of Economic Research. Wu: Stanford University. **SR** National Bureau of Economic Research Working Paper: 6022; National

Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** $5.00. **JE** G11, G12. **KW** Asset Pricing. Asymmetric Volatility. Risk Premium. Leverage. Portfolios.
AB *It appears that volatility in equity markets is asymmetric:* returns and conditional volatility are negatively correlated. The authors provide a unified framework to simultaneously investigate asymmetric volatility at the firm and the market level and to examine two potential explanations of the asymmetry: leverage effects and time-varying risk premiums. Their empirical application uses the market portfolio and portfolios with different leverage constructed from Nikkei 225 stocks, extending the empirical evidence on asymmetry to Japanese stocks. Although volatility asymmetry is present and significant at the market and the portfolio levels, its source differs across portfolios. The authors find that it is important to include leverage ratios in the volatility dynamics but that their economic effects are mostly dwarfed by the volatility feedback mechanism. Volatility feedback is enhanced by a phenomenon that the authors term covariance asymmetry: conditional covariances with the market increase only significantly following negative market news.

Belfield, C. R.
TI The Consequences of Drop-Outs on the Cost-Effectiveness of 16-19 Colleges. **AU** Fielding, A.; Belfield, C. R.; Thomas, H. R.

TI An Investigation of Performance and Cost-Effectiveness in GCE A-Level Provision in the FEFC Funded Sector. **AU** Fielding, A.; Belfield, C. R.; Thomas, H. R.

Bende-Nabende, A.
PD October 1997. **TI** FDI, Policy Adjustment and Endogenous Growth: Multiplier Effects from a Small Dynamic Model for Taiwan 1959-1995. **AU** Bende-Nabende, A.; Ford, J. L. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics Discussion Paper: 97/19; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. Website: www.bham.ac.uk/economics. **PG** 24. **PR** 2 pounds; no charge to academics. **JE** E63, F21, F43, O11, O53. **KW** Foreign Direct Investment. Growth. Development. Liberalization. Multiplier Effects.
AB Growth in the Pacific Rim countries has become the focus of much interest for both governments and economists. This paper has been partly prompted by that fact but also by the newly-perceived role of FDI especially when viewed in the light of endogenous growth theory. A small, pilot, dynamic model of Taiwan is formulated to link (endogenous) growth viewed from the supply side to endogenous and exogenous influences. The latter incorporate aspects of most types of economic governance, including monetary and fiscal policy, liberalization and indicators of the extent of infrastructural development. Impact and dynamic multiplier effects are calculated from the econometric results for the eight endogenous variables (which include FDI and technology transfer) with respect to the nine exogenous variables.

PD November 1997. **TI** The Impact of FDI and Regional Economic Integration on the Economic Growth of the ASEAN-5 Economies, 1970-1994: A Comparative Analysis from a Small Structural Model. **AU** Bende-Nabende, A.; Ford, J. L.; Slater, J. R. **AA** University of Birmingham.

SR University of Birmingham, Department of Economics Discussion Paper: 97/13; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. Website: www.bham.ac.uk/economics. **PG** 30. **PR** 2 pounds; no charge to academics. **JE** E60, F21, F40, O11, O53. **KW** Spillover Effects. Growth. APTA. Foreign Direct Investment.
AB Until three decades ago, FDI was associated with negative perceptions, but recent experiences have brought an awareness that it stimulates the economic growth process through its positive spillover effects. The past decades have also seen a surge in regional trade arrangements involving developed countries. This empirical study investigates whether FDI, in fact, caused spillover effects which have led to the economic growth of the ASEAN-5 economies (1970-94), and, if that is so, whether the ASEAN Preferential Trade Agreement (APTA) had a significant effect in attracting FDI to the region. Its findings are that FDI has stimulated economic growth through the human factors followed by technology transfer, international trade and learning by doing; and that the formation of the APTA had a lagged influence on FDI inflows to the advantage of the more developed member countries, and disadvantage of the less developed member countries.

PD November 1997. **TI** The Impact of FDI on the Economic Growth of the ASEAN-5 Economies, 1970-94: A Comparative Dynamic Multiplier Analysis from a Small Model with Emphasis on Liberalisation. **AU** Bende-Nabende, A.; Ford, J. L.; Slater, J. R. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics Discussion Paper: 97/18; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. Website: www.bham.ac.uk/economics. **PG** 39. **PR** 2 pounds; no charge to academics. **JE** E60, F21, F43, O11, O53. **KW** Foreign Direct Investment. Spillover Effects. Growth. Development. Asia.
AB Empirical studies based on structural (static) models have demonstrated that FDI stimulates the economic growth process of developing host countries through its positive spillover effects. In this study, the authors empirically investigate the dynamic impact of policy variables on FDI and its spillover effects variables and consequently the economic growth process of the ASEAN-5 economies (1970- 1994). The results demonstrate that whereas the impact is immediate in the more developed, politically stable and foreign investment friendly economies, there is a time lag (resulting from the "wait and see" strategy) in those economies which are less developed, politically unstable and have an element of hostility to foreign investment. They further suggest that the magnitude of the multiplier effects and the degree of the relocation of production increase as the level of economic development increases; while the speed of the spillover process slows down as the level of economic development increases.

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

Betts, Julian R.
PD September 1997. **TI** Do Grading Standards Affect the Incentive to Learn? **AA** University of California, San Diego.

SR University of California, San Diego, Department of Economics Working Paper: 97/22; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG 31. PR $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. JE I20. KW Education. Human Capital. Incentives.

AB The paper extends the literature on education production functions by arguing that incentives partly determine student performance. The paper develops a model in which schools' grading standards influence student effort. The model is tested using the Longitudinal Study of American Youth (LSAY). The level of grading standards at each school is a highly significant predictor of gains in student test scores, more so than are standard measures of school resources. Amount of homework performed by students also responds to grading standards. The paper concludes that higher grading standards represent an important tool for improving school quality.

PD April 1998. TI The Effects of Ability Grouping on Student Math Achievement and Resource Allocation in Secondary Schools. AU Betts, Julian R.; Shkolnik, Jamie L. AA Betts: University of California, San Diego. Shkolnik: National Opinion Research Center. SR University of California, San Diego, Department of Economics Working Paper: 96/25R; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG 40. PR $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. JE I21. KW Ability Grouping. Math Achievement. Secondary Schools.

AB A school policy of grouping students by ability has little effect on average math achievement growth. Unlike earlier research, this paper also finds little or no differential effects of grouping for high- achieving, average, or low-achieving students. One explanation is that the allocation of students and resources into classes is remarkably similar between schools that claim to group and those that claim not to group. The examination of three school inputs: class size, teacher education, and teacher experience, indicates that both types of schools tailor resources to the class ability level in similar ways, for instance by putting low-achieving students into smaller classes.

Bhatia, Kul
PD November 1997. TI Specific Inputs, Value-Added, and Production Linkages in Tax- Incidence Theory. AA University of Western Ontario. SR University of Western Ontario Department of Economics Research Reports: 9714; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.sscl.uwo.ca/economics. PG 31. PR $10.00 Canadian per paper. JE H22. KW Sector-Specific Inputs. Tax Incidence.

AB A general equilibrium framework is developed for analyzing the role of immobile factors of production which produce inputs for other sectors. The production process and the cross-sector connections are explicitly specified, and tax-incidence propositions are compared with those in related models. Numerical examples, based on a consistent data set for the U.S. economy, illustrate the results and highlight the difficulties that arise in defining equivalent specifications, analytically and empirically. Goods mobility offsets some effects of factor immobility, but the computed tax elasticities are rarely the same as in mobile-factors-only models. The Marshallian short-run-long- run distinction, blurred somewhat by production linkages, does not disappear.

Bilodeau, Marc
PD October 1997. TI Rational Nonprofit Entrepreneurship. AU Bilodeau, Marc; Slivinski, Al. AA Bilodeau: Universite de Sherbrooke. Slivinski: University of Western Ontario. SR University of Western Ontario Department of Economics Research Reports: 9709; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.sscl.uwo.ca/economics. PG 35. PR $10.00 Canadian per paper. JE L30. KW Nonprofit Firm. Entrepreneurship.

AB This paper derives the decision to found a nonprofit firm as the equilibrium outcome of a multistage game among individuals who would like a public good to be provided. The model predicts that if individuals will voluntarily contribute towards provision of the public good, then it is in the private interest of the entrepreneur to impose a non-distribution constraint on herself by founding a nonprofit firm. This decision also results in greater voluntary contributions than if the firm is proprietary.

Black, Dan
TI College Quality and the Wages of Young Men. AU Daniel, Kermit; Black, Dan; Smith, Jeffrey.

Black, Duncan
PD April 1997. TI Urban Growth. AU Black, Duncan; Henderson, Vernon. AA Black: Brown University. Henderson: Brown University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6008; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 48. PR $5.00. JE E20, J24, O40, R11, R12. KW Economic Fluctuations. Growth. Public Economics. Urban Economics. Cities.

AB This paper models and examines empirically the evolution of cities in an economy. Twentieth century evolution in the USA is characterized by parallel growth of cities of different types and on-going entry of new cities, together maintaining a stable relative size distribution of cities. Each city type has a particular industrial composition and good(s) it specializes in and corresponding equilibrium size. This evolution is modeled in an economy with exogenous population growth and endogenous human capital accumulation. Within cities, there are knowledge spillovers as well as scale externalities. Individual city sizes grow with human capital accumulation; and cities grow in number if national population growth is high enough. Different types of cities grow in parallel in size and human capital accumulation. However, per capita income and human capital levels differ across city types by production process and benefits of human investments and spillovers, so there is observed inequality across cities.

Blanco, Roberto
TI Una Clasificacion Por Riesgo de los Fondos de Inversion Espanoles. AU Ayuso, Juan; Blanco, Roberto; Sanchis, Alicia.

PD August 1998. TI Transmision de Informacion y Volatilidad Entre el Mercado de Futuros Sobre el Indice IBEX 35 y el Mercado al Contado. AA Banco de Espana. SR Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9815; Banco de Espana., Seccion de Publicaciones, Negociado de Distribucion y Gestion. Alcala 50, 28104 Madrid, Spain. Website: www.bde.es. PG 43. PR Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. JE G12, G13. KW Information Transmission. Futures Markets. Spot Markets.
AB This document analyzes the dynamic relationship between the futures market on IBEX 35 and the spot market. In particular, the following variables are examined: the mean and variance of prices and the volume of trade. The evidence shows the existence of bi-directional causal relations. The methodology used to specify the model of the mean differs from the majority of studies in the use of mid point of the bid-ask spread of prices instead of the transaction price, and the introduction of the cost of carry in the cointegration equation between the prices in the two markets. Both innovations have important effects on the results. In particular, a greater importance of the transmission of information from the spot to the futures market is obtained.

Block, Michael
PD June 1998. TI Fact-Finding Efficiency in Legal Procedure: An Experimental Comparison of Adversarial Versus Inquisitorial Regimes. AU Block, Michael; Parker, Jeffrey S.; Vyborna, Olga; Dusek, Libor. AA Block: University of Arizona. Parker: George Mason University. Vyborna: Charles University. Dusek: Liberal Institute. SR University of Arizona Economics Discussion Paper: 98/01; Patricia Blassingame, Discussion Paper Coordinator, University of Arizona, Department of Economics, McClelland Hall, Room 401, P.O. Box 210108, Tucson, AZ 85721-0108. PG 26. PR $2.00 U.S. and Canada; $3.00 Overseas by air. JE K40. KW Legal Procedure. Information Bevealation. Experimental Law and Economics.
AB none available.

Blomqvist, Ake
PD April 1997. TI Monopolistic Competition and Supply-Side Cost Sharing in the Physician Services Market. AA University of Western Ontario. SR University of Western Ontario Department of Economics Research Reports: 9705; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.sscl.uwo.ca/economics. PG 23. PR $10.00 Canadian per paper. JE D40, L80. KW Monopolistic Competition. Cost Sharing. Insurance. Physician Services.
AB The interaction of insurance and the market for physician services is considered in a model where imperfectly informed consumers rely on doctors for advice on the utilization of services and there is monopolistic competition among physicians on the basis of price and the quality of their advice. Equilibria under fee for service and capitation are compared, and I analyze the use of a system of capitation and partial supply-side cost sharing to attain an outcome superior to either pure fee for service or pure capitation.

Blomstrom, Magnus
PD April 1997. TI Regional Integration and Foreign Direct Investment. AU Blomstrom, Magnus; Kokko, Ari. AA Blomstrom: Stockholm Scool of Economics and National Bureau of Economic Research. Kokko: Stockholm School of Economics. SR National Bureau of Economic Research Working Paper: 6019; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 36. PR $5.00. JE E63, F13, F15, F21, F23. KW International Trade. Investment. Integration. Liberalization. Stabilization Policy.
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 flows in the integrating region. After setting up a conceptual framework for the analysis, the authors 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.

Bohn, Henning
PD June 1997. TI Social Security Reform and Financial Markets. AA University of California, Santa Barbara. SR University of California, Santa Barbara, Working Papers in Economics: 10/97; Department of Economics, University of California, Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. PG 43. PR no charge. JE E60. H55, H60. KW Social Security. Fiscal Policy. Retirement.
AB none available.

PD January 1998. TI Risk Sharing in a Stochastic Overlapping Generations Economy. AA University of California, Santa Barbara. SR University of California, Santa Barbara, Working Papers in Economics: 03/98; Department of Economics, Working Paper Coordinator, University of California, Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. PG 44. PR no charge. JE E61, E62, H55, H63. KW Fiscal Policy. Overlapping Generations. Risk Sharing.
AB This paper examines the impact of government policy on the allocation of aggregate risks in a stochastic OG model with production. The market allocation of risk depends significantly on the young generation's willingness to substitute intertemporally and on government policy. Safe government debt shifts productivity risk from old to young while wage-indexed social security is essentially neutral. I also compare the market allocation to the efficient allocation of risk. The market allocation is generally inefficient, except for the special case of wage-proportional incomes and logarithmic utility. Safe government debt seems to shift risk in the wrong direction.

PD March 1998. TI Should the Social Security Trust Fund Hold Equities? An Intergenerational Welfare Analysis. AA University of California, Santa Barbara. SR University of California, Santa Barbara, Working Papers in Economics: 04/98; Department of Economics, Working

Paper Coordinator, University of California, Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. **PG** 36. **PR** no charge. **JE** H55, E62. **KW** Social Security.
AB The paper examines the welfare effects of alternative government policies on the allocation of aggregate risks across generations. The paper develops a method for evaluating the welfare effects of marginal policy changes in an OG setting. The main application is the question of social security trust fund investments in equity securities. Theoretically, the welfare benefits depend significantly on the correlation between macroeconomic shocks and equity returns. I estimate the relevant correlation's, calibrate the model, and find positive net benefits for plausible parameters. Separately, I show that social security equity investments reduce the variance of payroll tax rates if equity returns are positively correlated with the wage-linked benefit obligations of the social security system.

PD March 1998. **TI** Will Social Security and Medicare Remain Viable as the U.S. Population is Aging? **AA** University of California, Santa Barbara. **SR** University of California, Santa Barbara, Working Papers in Economics: 05/98; Department of Economics, Working Paper Coordinator, University of California, Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. **PG** 45. **PR** no charge. **JE** H55, E62, J11. **KW** Social Security. Medicare. Aging.
AB Yes, subject to concerns about Medicare cost and potentially self-confirming skepticism. The U.S. social security system (broadly defined, including Medicare) faces significant financial problems as the result of an aging population. But demographic change is also likely to raise savings, increase wages, and reduce interest rates. Viewed in this context, the fiscal problems of retirement insurance seem overrated. A more serious issue is the rapid growth of Medicare spending. Up to a point, a growing GDP-share of medical spending is an efficient response to an aging population. But Medicare growth might be excessive due to moral hazard problems. Except for this caveat, social security is almost certainly economically viable. To examine the political viability of social security, I focus on intertemporal cost- benefit tradeoffs in a median voter setting. For a variety of assumptions. I find that social security will retain majority support. I also discuss the role of altruism, redistribution and multi- dimensional voting and find that they provide additional voter support for social security.

Bollerslev, Tim
TI Provide Good Volatility Forecasts. **AU** Andersen, Torben G.; Bollerslev, Tim.

Booth, Alison L.
PD December 1997. **TI** New Men and New Women? A Comparison of Paid Work Propensities From a Panel Data Perspective. **AU** Booth, Alison L.; Serrano, Carlos Garcia; Jenkins, Stephen P. **AA** Booth and Jenkins: University of Essex. Serrano: University of Essex and Universidad de Alcala de Henares, Spain. **SR** Centre for Economic Policy Research Discussion Paper: 1775; 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** J21, J22, J23, J64. **KW** Work. Employment. Labor Supply. Panel Data. Participation.
AB The paper uses BHPS waves 1-5 (1991-5) to compare paid work participation rates of men and women. Year-on-year persistence in paid work propensities is high, but greater for men than women. Non-work persistence is higher for women. Using panel data probit regression models, the paper also investigates why men's and women's participation rates differ, comparing the roles of differences in observable characteristics and differences in rates of return to these characteristics, while also controlling for unobserved heterogeneity. Most of the difference in participation rates is accounted for by the differences in returns associated with the presence of children, especially young ones.

Border, Kim C.
PD November 1997. **TI** Coherent Odds and Subjective Probability. **AU** Border, Kim C.; Segal, Uzi. **AA** Border: California Institute of Technology. Segal: University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Reports: 9717; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.sscl.uwo.ca/economics. **PG** 15. **PR** $10.00 Canadian per paper. **JE** none available. **KW** Coherent Odds. Subjective Probability.
AB none available.

Bover, Olympia
PD March 1998. **TI** A Comparative Study of the Portuguese and Spanish Labour Markets. **AU** Bover, Olympia; Garcia-Perea, Pilar; Portugal, Pedro. **AA** Bover and Garcia-Perea: Banco de Espana. Portugal: Banco de Portugal. **SR** Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9807; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid, Spain. Website: www.bde.es. **PG** 24. **PR** Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** J21, J30, J50, J64, J65. **KW** Unemployment. Wages. Collective Bargaining. Firing Costs. Labor Markets.
AB Spain faces the highest unemployment rate among the European Union countries, and Portugal one of the lowest. However, superficially, these two countries share common labor market features: they both have the most stringent job security rules in the OECD, the architecture of their bargaining systems appears identical, and the generosity of their unemployment insurance system seems, after 1989, roughly comparable. In this paper the authors address this puzzle by providing a systematic comparison of the Portuguese and Spanish labor markets. They find that, at a closer look, there are differences in unemployment benefits, differences in wage flexibility, and, in practice higher firing costs in Spain. The authors conclude that a key factor in explaining the difference in Portuguese and Spanish unemployment rates since the late seventies is the wage adjustment process. In turn, the wage adjustment in the two countries may have been influenced by the unemployment benefit system.

Braden, J. B.
PD May 1997. **TI** The Demand for Synthetic Fuels: Contingent Valuation of Quality- Differentiated Factors of Production. **AU** Braden, J. B.; Kolstad, C. D.; Woock, R. A.; Machado, J. A. **AA** Braden: University of Illinois. Kolstad: University of California, Santa Barbara. Woock: U.S. West Advanced Technologies, Boulder, CO; Machado: New University of Lisbon, Portugal. **SR** University of California,

Santa Barbara, Working Papers in Economics: 08/97; Department of Economics, Working Paper Coordinator, University of California, Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. PG 30. PR no charge. JE L90, Q40, Q20. KW Contingent Valuation. Coal.
AB The paper concerns measuring the demand for a "synthetic" fuel -- desulfurized coal -- using contingent valuation techniques. This represents one of the first times this method has been applied to factors of production. A complicating factor is that the synthetic fuel can be of various qualities. The empirical results illustrate the difficulty of configuring synthetic fuels to meet the requirements of existing generating plants. The contributions of the paper are in extending contingent valuation to quality-differentiated factor demand, using robust estimation techniques to reduce the influence of outliers, and estimating the returns to investment in coal desulfurization.

Braun, R. Anton
TI Transaction Services, Inflation, and Welfare. AU Aiyagari, S. Rao; Braun, R. Anton; Eckstein, Zvi.

Brown, Donald J.
PD March 1998. TI Estimation of Nonparametric Functions in Simultaneous Equations Models, with an Application to Consumer Demand. AU Brown, Donald J.; Matzkin, Rosa L. AA Brown: Yale University. Matzkin: Northwestern University. SR Yale Cowles Foundation Discussion Paper: 1175; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. PG 17. PR no charge up to 3 papers; $3.00 domestic; 4.00 International. JE C13, C14, C30. KW Simultaneous Equations. Nonparametric Estimation. Random Utility Functions.
AB We present a method for consistently estimating nonparametric functions and distributions in simultaneous equations models. This method is used to identify and estimate a random utility model of consumer demand. Our identification conditions for this particular model extend the results of Houthakker (1950), Uzawa (1971) and Mas- Colell (1977), where a deterministic utility function is uniquely recovered from its deterministic demand function.

Broze, Laurence
PD March 1997. TI Estimation of a Latent Linear Model Based on the Rank Statistics of the Dependent Variable. AU Broze, Laurence; Jouneau, Frederic. AA Universite Catholique de Louvain and GREMARS-Lille III. SR Universite Catholique de Louvain CORE Discussion Paper: 9721; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 14. PR $100 per year. JE C14, C51, C52, D20. KW Dependent Variables. Probit. Production Functions. Estimation. Robustness.
AB In this paper the authors study a new type of latent model in which only the rank statistics of the dependent variable is observed. This problem appears naturally in the microeconometric literature, in particular in the case of the parametric estimation of a production function when the output is poorly observed. A full information approach seems difficult. So the authors consider another model which describes part of the information of the first one. This second model is a Probit model with serial correlations. The inferential problems (test and estimation) have been studied in the literature but not from this viewpoint. The authors show by simulations that the proposed estimators behave nicely even in relatively small samples. They also perform the estimation of a production function on a real data set.

Bucovetsky, Sam
PD January 1997. TI Tax Competition and Revelation of Preferences for Public Expenditure. AU Bucovetsky, Sam; Marchand, Maurice; Pestieau, Pierre. AA Bucovetsky: York University and Universite Catholique de Louvain. Marchand: Universite Catholique de Louvain. Pestieau: Universite de Liege and Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9703; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 21. PR $100 per year. JE H24, H41, H71, H73, H77. KW Fiscal Policy. Public Goods. Capital Income Tax.
AB This paper considers a federal country composed of local jurisdictions which differ in their taste for public goods and finance public spending by a source-based tax on capital income. The taste for public goods is private information of jurisdictions. By transferring differential grants to jurisdictions the central government aims at both reducing the misallocation of capital due to the diverging jurisdictional tax rates on capital income and getting closer to the optimal balance between private and public consumption in every jurisdiction. The purpose of the paper is to characterize the optimal grant policy of the central government. It is shown that there persist at the optimum both some misallocation of capital and some violation of the Samuelson rule in every jurisdiction.

Buiter, Willem H.
PD March 1998. TI The Young Person's Guide to Neutrality, Price Level Indeterminacy, Interest Rate Pegs and Fiscal Theories of the Price Level. AA University of Cambridge. SR Centre for Economic Policy Research Discussion Paper: 1799; 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 E31, E42, E52, E58. KW Neutrality. Price Level. Interest Rate Pegs. Fiscal Theories. Monetary Policy.
AB The paper establishes the following: First, money is neutral even if there is a non-zero stock of non-monetary nominal public debt, because the government adjusts real taxes to satisfy its inter-temporal budget constraint. Second, Woodford's fiscal theory of the price level, according to which for certain fiscal rules the (initial) price level is independent of the nominal money stock, is invalid. It combines an overdetermined fiscal-financial program with an unwarranted weakening of the government's inter-temporal budget constraint, requiring it to hold only in equilibrium. Third, there is price level determinacy under an exogenous nominal interest rate rule if the transactions technology has cash-in-advance features. The price level is hysteric in this case. Finally, it is not possible to draw inferences about the historical process of technological improvements in the transactions technology leading to a cashless economy, by studying the limiting behavior of a sequence of histories.

Bulir, Ales

PD January 1998. TI Income Inequality: Does Inflation Matter? AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/07; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 34. PR not available. JE C21, D31, E31, O15. KW Income Distribution. Inflation. Kuznets Hypothesis.

AB This paper contributes to the income inequality literature that is based on the traditional Kuznets model. Price stability, financial deepening, level of development, state employment, and fiscal redistribution are found to enhance income equality in a given country. While the effect of price stability is uniform for all levels of GDP per capita, the effect of financial deepening is found to increase with the level of development. Moreover, tight monetary policies do not seem to have any austere effects; low inflation reinforces, rather than counteracts, the income-equalizing effect of fiscal redistribution.

Bullard, James

TI Complex Eigenvalues and Trend-Reverting Fluctuations. AU Azariadis, Costas; Bullard, James; Ohanian, Lee E.

Bulow, Jeremy

PD December 1997. TI The Winner's Curse and the Failure of the Law of Demand. AU Bulow, Jeremy; Klemperer, Paul. AA Bulow: Stanford University. Klemperer: Nuffield College. SR Centre for Economic Policy Research Discussion Paper: 1754; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 23. PR 5 pounds or $10.00. JE D44, G24, G30, L96. KW Auction Theory. Common Value. Winner's Curse. Spectrum Auction. Airwave Auction.

AB We usually assume increases in supply, allocation by rationing, and exclusion of potential buyers will never raise prices. But all of these activities raise the expected price in an important set of cases when common-value assets are sold. Furthermore, when we make the assumptions needed to rule out these "anomalies" when buyers are symmetric, small asymmetries among buyers necessarily cause the anomalies to reappear.

Burns, Patrick

PD April 1998. TI Correlations and Volatilities of Asynchronous Data. AU Burns, Patrick; Engle, Robert F.; Mezrich, Joseph. AA Burns: Burns Statistics. Engle: University of California, San Diego. Mezrich: Morgan, Stanley & Co., Inc. SR University of California, San Diego, Department of Economics Working Paper: 97/30R; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG 15. PR $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. JE C32, G15. KW Correlation. Global Portfolio. Risk Management. Nonsynchronous. GARCH. Volatility. Value at Risk.

AB Asset prices are typically measured when markets close however the closing times may differ across markets. As a result the returns appear to have predictability and correlations are understated. This will distort the value of portfolios, value at risk measures, and hedge strategies. A solution is proposed. Prices can be "synchronized" by computing estimates of the values of assets even when markets are closed, given information from markets which are open. From these prices, synchronized returns are defined and can be used to perform standard calculations including measuring time varying volatilities and correlations with GARCH. The method is applied to G7 index data.

Burridge, Peter

TI An Integral Inequality on C([0,1]) with Application to the Ornstein-Uhlenbeck Process. AU Bailey, Ralph W.; Burridge, Peter; Nandeibam, Shasikanta.

Cabrales, Antonio

PD May 1998. TI Implementation, Elimination of Weakly Dominated Strategies and Evolutionary Dynamics. AU Cabrales, Antonio; Ponti, Giovanni B. AA Cabrales: Universitat Pompeu Fabra and ELSE. Ponti: University of California, Santa Barbara and ELSE. SR University of California, Santa Barbara, Working Papers in Economics: 06/98; Department of Economics, Working Paper Coordinator, University of California, Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. PG 32. PR no charge. JE C62, C73, D78. KW Implementation Theory. Bounded Rationality. Learning Dynamics.

AB This paper studies convergence and stability properties of Sjostrom's (1994) mechanism, under the assumption that boundedly rational players find their way to equilibrium using monotonic learning dynamics and best-reply dynamics. This mechanism implements most social choice functions in economic environments using as a solution concept one round of deletion of weakly dominated strategies and one round of deletion of strictly dominated strategies. However, there are other sets of Nash equilibria, whose payoffs may be very different from those desired by the social choice function. With monotonic dynamics, all these sets of equilibria contain limit points of the learning dynamics. Furthermore, even if the dynamics converge to the "right" set of equilibria (i.e. the one which contains the solution of the mechanism), it may converge to an equilibrium which is worse in welfare terms. In contrast with this result, any interior solution of the best-reply dynamics converges to the equilibrium whose outcome the planner desires.

Cabrero, Alberto

PD August 1998. TI The Controllability of a Monetary Aggregate in EMU. AU Cabrero, Alberto; Escriva, Jose Luis; Munoz, Emilio; Penalosa, Juan. AA Banco de Espana. SR Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9817; Banco de Espana., Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid, Spain. Website: www.bde.es. PG 12. PR Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. JE E41, E52, E58, F33. KW European Monetary Union. Central Banks. Monetary Policy. Controllability. Money Demand.

AB This paper analyzes the possibilities for the ECB effectively to control the course of a monetary aggregate representative of liquidity in EMU. Such controllability is especially necessary if the ECB decides to apply a strategy monitoring an objective in terms of a monetary aggregate. Section 2 revises the mechanisms through which monetary policy can control the money stock. Section 3 examines the

empirical properties of the demand for money in EMU and in a country, such as Germany, which continues to set objectives in terms of a monetary aggregate. Section 4 shows the differential effects arising from implementing a common monetary policy in EMU 1 compared with those that would ensue were there a degree of control of the monetary magnitudes such as that in Germany.

Cadle, P. J.

TI Market Structure, Concentration and Performance: Jordanian Banking System, 1980-1993. AU Al-Karasneh, Ibrahim; Cadle, P. J.; Ford, J. L.

Callen, Tim

PD December 1997. TI Empirical Determinants of Household Saving: Evidence From OECD Countries. AU Callen, Tim; Thimann, Christian. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/181; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 26. PR not available. JE E21, H24, H55. KW Household Saving. Tax Structure. Social Security System.
AB This paper analyzes the empirical determinants of household saving using data from 21 OECD countries for 1975-95. A particular focus is the influence of the tax and social security systems on household saving. The paper therefore extends the usual set of explanatory variables used to explain household saving behavior to include variables that capture the structure of the tax system and the financing and generosity of the social security and welfare system. These variables are found to have an important impact on household saving. Accordingly, by changing the design of these systems, governments may be able to influence saving.

Canzoneri, Matthew B.

PD January 1998. TI Is the Price Level Determined by the Needs of Fiscal Solvency? AU Canzoneri, Matthew B.; Diba, Behzad T.; Cumby, Robert E. AA Georgetown University. SR Centre for Economic Policy Research Discussion Paper: 1772; 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 E31, E42, E52, H62. KW Price Determination. Monetary Policy. Fiscal Policy.
AB A new theory of price determination suggests that if primary surpluses are independent of the level of debt, the price level has to "jump" to assure fiscal solvency. In this regime (which we call fiscal dominant), monetary policy has to work through seignorage to control the price level. If, on the other hand, primary surpluses are expected to respond to the level of debt in a way that assures fiscal solvency (a regime we call money dominant), then the price level is determined in more conventional ways. This paper develops testable restrictions that differentiate between the two regimes. Using post-war data, the paper presents what we think is overwhelming evidence that the United States is in a money dominant regime; even the post-Reagan data (1980-95) seem to support that contention.

Cardoso, Eliana

PD March 1998. TI Virtual Deficits and the Patinkin Effect. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/41; International Monetary Fund, 700 19th Street, Washington, DC 20431.
PG 40. PR not available. JE E10, E31, E58, E62. KW Inflation. Fiscal Deficits. Seigniorage. Reverse Tanzi Effect. Stabilization. Reserve Requirement.
AB The paper develops a model of inflationary finance that defines the fiscal deficit as a function of the virtual deficit -- a deficit that would be observed if inflation were zero. It studies the negative relationship between the inflation rate and real government expenditures -- the Patinkin effect. The model outperforms others in explaining four- digit inflation rates that never explode into hyperinflation. It also explains how apparently expansionist fiscal policies end in real deficits that are small and compatible with the small amount of seigniorage that can be collected at high inflation rates. Finally, it applies the model to the case of Brazil.

Carson, Richard T.

PD February 1997. TI The Relationship Between Air Pollution Emissions and Income: U.S. Data. AU Carson, Richard T.; Jeon, Yongil. AA University of California, San Diego. SR University of California, San Diego, Department of Economics Working Paper: 97/08; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG 9. PR $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. JE Q20. KW Environmental Kuznets Curve.
AB Considerable interest has focused on the possible existence of an environmental Kuznets curve whereby pollution first increases but later falls with increasing income. Empirical studies have concentrated on a wide spectrum of countries and run into inevitable problems of data quality and comparability. We avoid these problems by looking across the 50 U.S. states and find four major classes of air pollutants which decrease with increasing per capita income. Additionally, we look at the best measured of these pollutants, air toxics, for the period 1988-1992 and again find that an increase in income is associated with a decrease in per capita emissions. Considering the starting conditions in this case, however, reveals a more subtle relationship.

Cassard, Marcel

PD December 1997. TI Risk Management of Sovereign Assets and Liabilities. AU Cassard, Marcel; Folkerts-Landau, David. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/166; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 53. PR not available. JE E58, H63. KW Sovereign Debt. Reserves Management.
AB In an environment of sizable and volatile capital flows and integrated international capital markets, large and unhedged net external sovereign liabilities expose countries to swings in international asset prices and to potential speculative currency attacks. The paper argues that an essential step in reducing emerging market vulnerability to such external shocks is to reform the institutional arrangements governing asset and liability management policies, so as to promote a transparent, publicly accountable, and professional incentive structure.

Cavalcanti, Ricardo de O.

PD September 1997. TI Private Money and Reserve Management in a Random Matching Model. AU Cavalcanti, Ricardo de O.; Erosa, Andres; Temzelides, Ted.

AA Cavalcanti: University of Miami. Erosa: University of Western Ontario. Temzelides: University of Iowa. SR University of Western Ontario Department of Economics Research Reports: 9715; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.sscl.uwo.ca/economics. PG 43. PR $10.00 Canadian per paper. JE E40, E50. KW Private Money. Reserve Management. Matching Model.

AB We introduce an element of centralization in a random matching model of money that allows for private liabilities to circulate as media of exchange. Some agents, which we identify as banks, are endowed with the technology to issue notes and to record-keep reserves with a central clearinghouse, which we call the treasury. The liabilities are redeemed according to a stochastic process that depends on the endogenous trades. The treasury removes the banking technology from banks that are not able to meet the redemptions in a given period. This, together with the market incompleteness, gives rise to a reserve management problem for the issuing banks. We demonstrate that "sufficiently patient" banks will concentrate on improving their reserve position instead of pursuing additional issue. The model provides a first attempt to reconcile limited note issue with optimizing behavior by banks during the National Banking Era.

Cecchetti, Stephen G.

PD April 1997. TI Understanding the Great Depression: Lessons for Current Policy. AA Ohio State University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6015; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 26. PR $5.00. JE E32, E44, E58, G28, N12. KW Monetary Policy. Central Banks. Great Depression. Deflation. Gold Standard.

AB Over the four years beginning in the summer of 1929, financial markets, labor markets and goods markets all virtually ceased to function. Throughout this, the government policymaking apparatus seemed helpless. What lessons can be drawn from the study of these events? In this essay, the author argues that the Federal Reserve played a key role in nearly every policy failure during this period, and so the major lessons learned from the Great Depression concern the function of the central bank and the financial system. In the author's view, there is now a broad consensus supporting three conclusions. First, the collapse of the finance system could have been stopped if the central bank had properly understood its function as the lender of last resort. Second, deflation played an extremely important role deepening the Depression. And third, the gold standard, as a method for supporting a fixed exchange rate system, was disastrous.

Chacko, George

PD May 1997. TI Average Interest. AU Chacko, George; Das, Sanjiv Ranjan. AA Chacko: Harvard Business School. Das: Harvard Business School and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6045; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 37. PR $5.00. JE G12, G13. KW Asset Pricing. Options. Mean Reversion. Hedging. Risk.

AB The authors develop analytic pricing models for options on averages by means of a state-space expansion method. These models augment the class of Asian options to markets where the underlying traded variable follows a mean-reverting process. The approach builds from the digital Asian option on the average and enables pricing of standard Asian calls and puts, caps and floors, as well as other exotics. The models may be used (i) to hedge long period interest rate risk cheaply, (ii) to hedge event risk (regime based risk), (iii) to manage long term foreign exchange risk by hedging through the average interest differential, (iv) managing credit risk exposures, and (v) for pricing specialized options like range-Asians. The techniques in the paper provide several advantages over existing numerical approaches.

Chalk, Nigel

PD March 1998. TI Fiscal Sustainability With Non-Renewable Resources. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/26; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 36. PR not available. JE C62, E62, H60, H30. KW Fiscal Sustainability. Non-Renewable Resources. Oil Producers.

AB This paper assesses sustainable fiscal behavior in an economy where wealth is derived predominantly from a non-renewable resource. It explores the issue in a simple dynamic framework that highlights the structural weaknesses in the underlying budgetary position, takes into account the rate of depletion of a country's natural resource base, and examines the impact of changes in a country's terms of trade. An alternative indicator of fiscal sustainability is derived, and the principal factors determining sustainability are identified. The results of the analysis are applied to Venezuela and Kuwait.

Chari, V. V.

PD March 1997. TI Hot Money. AU Chari, V. V.; Kehoe, Patrick J. AA Chari: Federal Reserve Bank of Minneapolis and University of Minnesota. Kehoe: Federal Reserve Bank of Minneapolis, University of Pennsylvania and National Bureau of Economic Research. SR Federal Reserve Bank of Minneapolis Staff Report: 228; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. PG 15. PR no charge. JE F34, F41. KW Herding. Capital Flight. Debt. Default.

AB The conventional wisdom is that capital flows between developing countries and developed countries are more volatile than can be justified by fundamentals. In this paper we construct a simple model in which frictions in international financial markets together with occasional fiscal crises lead to excessive volatility of capital flows. The financial market frictions inhibit the transmission of information across investors and lead to herdlike behavior. The fiscal crises lead to standard debt-default problems. These crises act as tests of fire for borrowing countries. If a country survives this test, its reputation is enhanced and future capital flows become less volatile. Failing this test is associated with a loss of reputation and a decline in the amount of capital flows.

PD April 1997. TI Hot Money. AU Chari, V. V.; Kehoe, Patrick J. AA Chari: University of Minnesota. Kehoe: University of Pennsylvania. SR National Bureau of Economic Research Working Paper: 6007; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge,

MA 02138. Website: www.nber.org. **PG** 17. **PR** $5.00.
JE F21, F34, F36, G15, O16. **KW** International Finance.
Debt. Fiscal Crises. Capital Flows. Investment.
AB See abstract for Chari, V. V. and Patrick J. Kehoe, March
1997. "Hot Money". Federal Reserve Bank of Minneapolis
Staff Report: 228; Research Department, Federal Reserve Bank
of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401.
Website: http://woodrow.mpls.frb.fed.us.

PD July 1998. **TI** Optimal Fiscal and Monetary Policy.
AU Chari, V. V.; Kehoe, Patrick J. **AA** Chari: University of
Minnesota and Federal Reserve Bank of Minneapolis. Kehoe:
University of Pennsylvania, Federal Reserve Bank of
Minneapolis and National Bureau of Economic Research.
SR Federal Reserve Bank of Minneapolis Staff Report: 251;
Research Department, Federal Reserve Bank of Minneapolis,
250 Marquette Ave., Minneapolis, MN 55401. Website:
http://woodrow.mpls.frb.fed.us. **PG** 107. **PR** no charge.
JE E13, E52, F40, H68, H87. **KW** Tax-Smoothing.
Chamley-Result. Capital Taxation. Ramsey Politics. Friedman
Rule. Business Cycles. Production Efficiency. Shock Absorber.
AB We provide an introduction to optimal fiscal and
monetary policy using the primal approach to optimal taxation.
We use this approach to address how fiscal and monetary policy
should be set over the long run and over the business cycle. We
find four substantive lessons for policymaking: Capital income
taxes should be high initially and then roughly zero; tax rates
on labor and consumption should be roughly constant; state-
contingent taxes on assets should be used to provide insurance
against adverse shocks; and monetary policy should be
conducted so as to keep nominal interest rates close to zero. We
begin optimal taxation in a static context. We then develop a
general framework to analyze optimal fiscal policy. Finally, we
analyze optimal monetary policy in three commonly used
models of money: a cash-credit economy, a money-in-the-
utility-function economy, and a shopping-time economy.

Chen, Xiaohong
PD May 1997. **TI** Improved Rates and Asymptotic
Normality for Nonparametric Neural Network Estimators.
AU Chen, Xiaohong; White, Halbert L. **AA** Chen:
University of Chicago. White: University of California, San
Diego. **SR** University of California, San Diego, Department
of Economics Working Paper: 97/11; Working Paper
Coordinator, Department of Economics, 0508, University of
California, San Diego, 9500 Gilman Drive, La Jolla, CA
92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers.
PG 19. **PR** $3.00 U.S. and Canada; $7.00 Foreign; make
checks payable to Regents, University of California.
JE C14. **KW** Rate of Convergence. Asymptotic Normality.
Artificial Neural Networks. Hypothesis Testing.
AB not available.

Chinn, Menzie David
PD April 1997. **TI** Sectoral Productivity, Government
Spending and Real Exchange Rates: Empirical Evidence for
OECD Countries. **AA** University of California, Santa Cruz
and National Bureau of Economic Research. **SR** National
Bureau of Economic Research Working Paper: 6017; National
Bureau of Economic Research, 1050 Massachusetts Avenue,
Cambridge, MA 02138. Website: www.nber.org. **PG** 34.
PR $5.00. **JE** D24, F31, F41, O47. **KW** International
Finance. Exchange Rates. Productivity. Cointegration. Time
Series.

AB This paper investigates the long- and short-run
determinants of the real exchange rate using a panel of data for
fourteen OECD countries. The data are analyzed using time
series and panel unit root and panel cointegration methods. Two
dynamic productivity-based models are used to motivate the
empirical exercise. The candidate determinants include
productivity levels in the traded and in the nontraded sectors,
government spending, the terms of trade, income per capita,
and the real price of oil. The empirical results indicate that it is
easier to detect cointegration in panel data than in the available
time series; moreover, the estimate of the rate of reversion to a
cointegrating vector defined by real exchange rates and sectoral
productivity differentials is more precise as long as
homogeneity of parameters is imposed upon the panel. The
most empirically successful model of the real exchange rate
includes sectoral productivity measures and government
spending.

Clarke, Rosemary
PD December 1997. **TI** The Welfare Effects of Removing
the West German Hard Coal Subsidy. **AU** Clarke, Rosemary;
Edwards, T. Huw. **AA** University of Birmingham.
SR University of Birmingham, Department of Economics
Discussion Paper: 97/23; Department of Economics School of
of Social Sciences, University of Birmingham, Edgbaston,
Birmingham B15 2TT, United Kingdom. Website:
www.bham.ac.uk/economics. **PG** 18. **PR** 2 pounds; no
charge to academics. **JE** D62, H23, Q25, Q48.
KW Germany. Energy. Subsidies. Pollution. Coal.
AB The effects of removing the German coal subsidy and of
introducing a carbon tax are explored using a single country,
static computable general equilibrium model. This model takes
into account the distorted nature of the German energy market,
the possibility of fuel substitution, terms of trade effects and
changes in pollution emissions. Welfare increases following
the removal of the hard coal subsidy, even following the
introduction of a carbon tax, once the benefits of pollution
abatement are taken into account.

Cockburn, Iain
PD April 1997. **TI** Public-Private Interaction and the
Productivity of Pharmaceutical Research. **AU** Cockburn,
Iain; Henderson, Rebecca. **AA** Cockburn: University of
British Columbia and National Bureau of Economic Research.
Henderson: Massachusetts Institute of Technology and National
Bureau of Economic Research. **SR** National Bureau of
Economic Research Working Paper: 6018; National Bureau of
Economic Research, 1050 Massachusetts Avenue, Cambridge,
MA 02138. Website: www.nber.org. **PG** 36. **PR** $5.00.
JE H89, L23, L65, O31, O38. **KW** Productivity.
Pharmaceuticals. Research and Development. Biomedical
Research. Production Organization.
AB The authors examine the impact of publicly funded
biomedical research on the in-house research of the for-profit
pharmaceutical industry. Qualitative analysis of the history of
the discovery and development of a sample of 21 significant
drugs, and a program of interviews with senior managers and
scientists reveals a complex and often bi- directional
relationship between the public and private sectors of the
industry, illustrating the difficulties inherent in estimating the
rate of return to public support of basic research. This analysis
also highlights the importance for private sector firms of
maintaining close connections to the "upstream" scientific

community, which requires them to make significant investments in doing in-house basic research and adopting appropriate internal incentives and procedures. The authors measure the extent and nature of this "connectedness" using data on coauthorship of scientific papers between pharmaceutical company scientists and publicly funded researchers. These measures are significantly correlated with firms' internal organization.

Cohen, Daniel
PD December 1997. TI Growth and External Debt: A New Perspective on the African and Latin American Tragedies. AA CEPREMAP. SR Centre for Economic Policy Research Discussion Paper: 1753; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 12. PR 5 pounds or $10.00. JE F13, F34, O40. KW Economic Growth. External Debt. Trade Liberalization.
AB This paper addresses two puzzles of the growth literature: the failure of standard growth equations to account for slow growth in Latin America and Africa; and the surprising failure of trade to explain growth when trade liberalization appears to play a significant role. The paper shows that: i) African growth is readily explained by macroeconomic mismanagement and low investment; ii) trade liberalization should be taken as a proxy for good "macroeconomic" management rather than a genuine measure of the effect of trade upon growth; and iii) poor growth in Latin America (which does not seem to be explained by the preceding feature) is explained well by a variable (constructed in the text) representing the likelihood of debt crisis.

Cohen, Darrel
PD May 1997. TI Inflation and the User Cost of Capital: Does Inflation Still Matter? AU Cohen, Darrel; Hassett, Kevin A.; Hubbard, R. Glenn. AA Cohen and Hassett: Board of Governors of the Federal Reserve System. Hubbard: Columbia University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6046; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 42. PR $5.00. JE E21, E22, E31, E52, E60. KW Economic Fluctuations. Inflation. Monetary Economics. User Costs. Investment.
AB In the late 1970's, many economists argued that the deleterious effects of inflation on the user cost of capital for U.S. firms were large. Since that time, the tax code has changed, the level of inflation has dropped, and the "canonical" model of investment has evolved. This paper demonstrates that the net effect of these changes has not relegated inflation to the sidelines. Indeed, the authors conclude that: (1) inflation, even at its relatively low current rates, continues to increase the user cost of capital significantly; (2) the marginal gain in investment in response to a percentage-point reduction in inflation is larger for lower levels of inflation; (3) the beneficial effects for steady-state consumption of lowering inflation even further than has been achieved to date would likely be significant; and (4) inflation has only a small impact on intratemporal distortion in the allocation of capital within the domestic business sector.

Cole, Harold L.
PD May 1998. TI Efficient Allocations with Hidden Income and Hidden Storage. AU Cole, Harold L.;

Kocherlakota, Narayana. AA Federal Reserve Bank of Minneapolis. SR Federal Reserve Bank of Minneapolis Staff Report: 238; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. PG 36. PR no charge. JE none available. KW Efficient Allocations. Hidden Income. Hidden Storage.
AB We consider an environment in which individuals receive income shocks that are unobservable to others and can privately store resources. We provide a simple characterization of the efficient allocation in cases in which the rate of return on storage is sufficiently high or, alternatively, in which the worst possible outcome is sufficiently dire. We show that, unlike in environments without unobservable storage, the symmetric efficient allocation is decentralizable through a competitive asset market in which individuals trade risk-free bonds among themselves.

PD May 1998. TI The Demand for Money and the Nonneutrality of Money. AU Cole, Harold L.; Ohanian, Lee E. AA Cole: Federal Reserve Bank of Minneapolis. Ohanian: University of Minnesota and Federal Reserve Bank of Minneapolis. SR Federal Reserve Bank of Minneapolis Staff Report: 246; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. PG 45. PR no charge. JE E32, E41, E52. KW Velocity. Money Shocks. Liquidity. Sticky Prices.
AB Many economists have worried about changes in the demand for money, since money demand shocks can affect output variability and have implications for monetary policy. This paper studies the theoretical implications of changes in money demand for the nonneutrality of money in the limited participation (liquidity) model and the predetermined (sticky) price model. In the liquidity model, we find that an important connection exists between the nonneutrality of money and the relative money demands of households and firms. This model predicts that the real effect of a money shock rose by 100 percent between 1952 and 1980, and subsequently declined 65 percent. In contrast, we find that the nonneutrality of money in the sticky price model is invariant to changes in money demands or other monetary factors. Several researchers have concluded from VAR analyses that the effects of money shock over time are roughly stable. This view is consistent with the predictions of the sticky price model, but is harder to reconcile with the specific pattern of time variation predicted by the liquidity model.

PD August 1998. TI Efficient Non-Contractible Investments. AU Cole, Harold L.; Mailath, George J.; Postlewaite, Andrew. AA Cole: Federal Reserve Bank of Minneapolis. Mailath and Postlewaite: University of Pennsylvania. SR Federal Reserve Bank of Minneapolis Staff Report: 253; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. PG 34. PR no charge. JE C70, D20, D52. KW Matching Models. Investment. Hold-Up Problems. Contracting.
AB This paper addresses the question of whether agents will invest efficiently in attributes that will increase their productivity in subsequent matches with other individuals. We present a two-sided matching model in which buyers and sellers make investment decisions prior to a matching stage. Once matched, the buyer and seller bargain over the transfer price. In contrast to most matching models, preferences over possible

matches are affected by decisions made before the matching process. We show that if bargaining respects the existence of outside options (in the sense that the resulting allocation is in the core of the assignment game), then efficient decisions can always be sustained in equilibrium. However, there may also be inefficient equilibria. Our analysis identifies a potential source of inefficiency not present in most matching models.

PD September 1998. **TI** Dynamic Games with Hidden Actions and Hidden States. **AU** Cole, Harold L.; Kocherlakota, Narayana. **AA** Cole: Federal Reserve Bank of Minneapolis. Kocherlakota: University of Minnesota and Federal Reserve Bank. **SR** Federal Reserve Bank of Minneapolis Staff Report: 254; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. **PG** 13. **PR** no charge. **JE** C63, C73. **KW** Unobservable States. Markov Equilibria. Imperfect Monitoring.
AB We consider a class of dynamic games in which each player's actions are unobservable to the other players and each player's actions can influence a state variable that is unobservable to the other players. We develop an algorithm that solves for the subset of sequential equilibria in which equilibrium strategies depend on private information only through the privately observed state.

Colombo, Emilio
PD September 1997. **TI** Restructuring as a Signal: A Simple Formalization. **AA** University of Southampton. **SR** University of Southampton Discussion Papers in Economics and Econometrics: 9714; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton SO17 1BJ, England. Website:www.soton.as.uk/discp.html. **PG** 28. **PR** on application. **JE** C72, L33, P31. **KW** Transitional Economy. Restructuring. Signaling. Game Theory.
AB Several studies stressed that contrary to the initial expectations, state-owned firms at the beginning of the transition, undertook painful measures to adjust to the new economic environment. This paper investigates this behavior in a simple game theoretic framework. It is argued that the massive amount of lay-offs created by state-owned firms during the initial phase of the transition can be interpreted as a signal directed to the banking sector in order to obtain more favorable financing conditions for the subsequent process of restructuring.

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

Cottarelli, Carlo
PD March 1998. **TI** The Nonmonetary Determinants of Inflation: A Panel Data Study. **AU** Cottarelli, Carlo; Griffiths, Mark; Moghadam, Reza. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/98/23; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 29. **PR** not available. **JE** E31, E42, E63. **KW** Inflation. Fiscal Policy. Panel Data.
AB This paper explains inflation performance in a sample of industrial and transition economies by looking at policymakers' incentives to inflate the economy, and the perceived costs of

disinflation. It finds a significant effect of fiscal deficits on inflation, particularly (but not exclusively) in countries where the government securities market is not well developed. Other factors with significant effect on inflation include relative price changes, central bank independence, the exchange rate regime, and the degree of price liberalization; there is only limited evidence that other structural factors, such as those influencing the natural rate of unemployment, have a significant effect on inflation.

Crawford, Vincent
PD July 1997. **TI** Learning Dynamics, Lock-In, and Equilibrium Selection in Experimental Coordination Games. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 97/19; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 32. **PR** $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. **JE** C72, C92. **KW** Learning, Equilibrium Selection. Coordination. Experimental Games.
AB This paper compares the leading theoretical approaches to equilibrium selection, both traditional and adaptive, in the light of recent experiments by Van Huyck, Battalio, and Beil (henceforth "VHBB") in which subjects repeatedly played coordination games, uncertain only about each other's strategy choices. The large strategy spaces of VHBB's designs and the variety of interaction patterns they considered yielded rich dynamics, with systematic differences in limiting outcomes across treatments. Explaining these differences promises to shed considerable light on equilibrium selection and coordination more generally, in the field as well as the laboratory. Following earlier analyses by Bruno Broseta and myself, I propose a model that gives a flexible characterization of individual behavior and allows for strategic uncertainty, in the form of idiosyncratic random shocks to players' adjustments. The model includes representatives of the leading approaches to equilibrium selection, which are distinguished by different values of behavioral parameters, including variances that represent the level of strategic uncertainty. The model provides a framework within which to estimate the parameters econometrically, using data from the experiments. The estimates suggest that VHBB's treatments evoked high initial levels of strategic uncertainty, declining steadily to zero as subjects learned to predict each other's responses.

Cremer, Jacques
PD June 1997. **TI** Contracts and Productive Information Gathering. **AU** Cremer, Jacques; Khalil, Fahad; Rochet, Jean-Charles. **AA** Cremer: CNRS, GREMAQ and IDEI, Toulouse and University of Southampton. Khalil: University of Washington. Rochet: Institut Universitaire de France, GREMAQ and IDEI, Toulouse. **SR** University of Southampton Discussion Papers in Economics and Econometrics: 9707; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton SO17 1BJ, England. Website: www.soton.as.uk/discp.html. **PG** 23. **PR** on application. **JE** D82, J41, L14, L51. **KW** Contracts. Principal Agent Contracts. Asymmetric Information.
AB The authors modify a standard Baron-Myerson model by

assuming that, instead of knowing the state of nature, the agent has to incur a cost X to learn it. Under these conditions, the principal will offer contracts that, depending on the value of X, incite the agent to gather or not to gather information. The authors study tradeoffs that are involved.

PD June 1997. TI Strategic Information Gathering Before a Contract is Offered. AU Cremer, Jacques; Khalil, Fahad; Rochet, Jean-Charles. AA Cremer: CNRS; GREMAQ and IDEI, Toulouse, France, and University of Southampton. Khalil: University of Washington. Rochet: Institut Universitaire de France; GREMAQ and IDEI, Toulouse. SR University of Southampton Discussion Papers in Economics and Econometrics: 9708; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton SO17 1BJ, England. Website: www.soton.as.uk/discp.html. PG 41. PR on application. JE D82, J41, L14, L22, L51. KW Principal Agent Contracts. Endogenous Information.

AB In a Baron-Myerson setup, the authors study a situation where an agent is initially uninformed, but can, at a cost, acquire information about the state of nature before the principal offers him a contract. For intermediate values of the cost of acquiring information, the agent's equilibrium strategy will be a mixed strategy: he will acquire information with a probability strictly between 0 and 2. The authors identify the contract that the principal will offer to such a "maybe informed" agent.

Cubeddu, Luis

PD August 1997. TI Marital Risk and Capital Accumulation. AU Cubeddu, Luis; Rios-Rull, Jose-Victor. AA Cubeddu: International Monetary Fund. Rios-Rull: Federal Reserve Bank of Minneapolis and University of Pennsylvania. SR Federal Reserve Bank of Minneapolis Staff Report: 235; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. PG 40. PR no charge. JE C63, D31, D58, E21, J12. KW Savings. Marriage. Dynamic General Equilibrium.

AB Between the sixties and the late eighties the percentages of low- saving single-parent households and people living alone have grown dramatically at the expense of high-saving married households, while the household saving rate has declined equally dramatically. A preliminary analysis of population composition and savings by household type seems to indicate that about half of the decline in savings is due to demographic change. We construct a model with agents changing marital status, but where the saving behavior of the households can adjust to the properties of the demographic process. We find that the demographic changes that reduce the number of married households (mainly higher divorce and higher illegitimacy) induce all household types to save more and that the effect on the aggregate saving rate is minuscule. We conclude that the drop in savings since the sixties is not due to changes in household composition.

Cumby, Robert E.

TI Is the Price Level Determined by the Needs of Fiscal Solvency? AU Canzoneri, Matthew B.; Diba, Behzad T.; Cumby, Robert E.

Daniel, Kermit

PD June 1997. TI College Quality and the Wages of Young Men. AU Daniel, Kermit; Black, Dan; Smith, Jeffrey.

AA Daniel: Wharton School of the University of Pennsylvania. Black: University of Kentucky. Smith: University of Western Ontario. SR University of Western Ontario Department of Economics Research Reports: 9707; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.sscl.uwo.ca/economics. PG 51. PR $10.00 Canadian per paper. JE I20, J30. KW Returns to Education. Human Capital. Wages.

AB Using the rich data from the National Longitudinal Survey of Youth, we show that several dimensions of college quality have substantial positive impacts on young men's wages. This finding is robust to a wide array of alternative specifications. Controlling for ability reveals that sorting of more able persons into better colleges accounts for only a modest portion of the unconditional quality effect. We find that young black men reap larger gains to quality than do young white men. Our results also indicate that attending a college with a racially diverse student body increases the later earnings of both white and black men.

Danthine, Jean-Pierre

PD January 1998. TI Productivity Growth, Consumer Confidence and the Business Cycle. AU Danthine, Jean-Pierre; Donaldson, John B.; Johnsen, Thore. AA Danthine: Universite de Lausanne. Donaldson: Columbia University. Johnsen: Norwegian School of Economics and Business Administration. SR Centre for Economic Policy Research Discussion Paper: 1779; 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 E10, E21, E32, J24. KW Business Cycles. Labor Productivity. Consumption.

AB The objective of this paper is to provide, in the context of a dynamic general equilibrium model, an answer to the following five questions: 1) To what extent does an economy subject to regular variations in labor productivity growth differ from one where labor productivity is constant? 2) What is the impact on major macroeconomic indicators of a one-time change in labor productivity growth? 3) What are the business cycle implications of autonomous (non-falsifiable) changes in growth expectations? 4) What is the potential of such expectation changes for explaining the volatility of consumption to output ratio? 5) Can autonomous changes in growth expectations help us understand recent business cycle episodes?.

PD February 1998. TI Non-Falsified Expectations and General Equilibrium Asset Pricing: The Power of the Peso. AU Danthine, Jean-Pierre; Donaldson, John B. AA Danthine: Universite de Lausanne. Donaldson: Columbia University. SR Centre for Economic Policy Research Discussion Paper: 1819; 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 D84, E32, G12. KW Rational Expectations. Asset Pricing. Equity Premium. Peso Problem. Business Cycles.

AB The authors discuss the extent to which the expectation of a rare event, not present in the usual post-war sample data, but not rationally excludable from the set of possibilities -- the peso problem -- can affect the behavior of rational agents and the characteristics of market equilibrium. To that end, the authors describe quantitatively the macroeconomic and

financial properties of a standard equilibrium business cycle model, modified to allow for a very small probability of a depression state. They are careful to contrast what would be the stationary probability distribution descriptive of the dynamic rational expectations equilibrium, from the empirically observed behavior of the economy under the same RE assumption when the depression does not appear in the sample. The effects of small probability events appear to be especially significant for financial market characteristics. The 6.2% premium is obtained in an economy where agents are only moderately risk averse.

Darbar, Salim M.
TI Sequencing Capital Account Liberalization: Lessons From the Experiences in Chile, Indonesia, Korea, and Thailand. AU Johnston, R. Barry; Darbar, Salim M.; Echeverria, Claudia.

Das, Sanjiv Ranjan
TI Average Interest. AU Chacko, George; Das, Sanjiv Ranjan.

de Castello Branco, Marta
PD February 1998. TI Pension Reform in the Baltics, Russia, and other Countries of the Former Soviet Union (BRO). AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/11; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 40. PR not available. JE H55, O57. KW Pension Reform. Transition. Social Protection.
AB Despite their increasing fiscal burden, the public pension systems of BRO countries are failing to provide adequate social protection. Although there is a broad consensus about the need for pension reforms, BRO countries are debating whether to embark on systemic reforms or whether to correct the distortions in their pay-as-you-go (PAYG) pension systems. The paper reviews the measures taken by BRO countries during the transition period to address their pension problems and examines the options for further reform. It makes a strong case for a gradual reform approach aimed at establishing a multi-pillar system over the long run, but initially focused on implementation of "high-quality" reforms of the PAYG system.

de Crombrugghe, Alain
PD December 1997. TI Fiscal Norming of Wages to Promote Employment with Monopoly Unions. AU de Crombrugghe, Alain; de Walque, Gregory. AA Facultes Universitaires Notre-Dame de la Paix. SR Centre for Economic Policy Research Discussion Paper: 1766; 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 D42, H22, J31, J51. KW Monopoly Unions. Wage Norm. Fiscal Incentives. Poland. Employment.
AB The paper analyzes how a firm-level tax (or subsidy) calculated on the average wage relative to a pre-set norm may promote employment. We assume a monopoly union setting wages at the firm level to maximize that part of the wage bill exceeding the reservation wage. The fiscal device affects union perception of labor demand and induces it to quote a lower wage and obtain a higher corresponding level of employment. Empirical tests are performed over a sample of 43 Polish firms in 1990 and 1991. They support our model assumptions as well

as the 'employment-enhancing' effect of the tax in Polish firms.

PD December 1997. TI Wage and Pension Pressure on the Polish Budget. AA Facultes Universitaires Notre-Dame de la Paix. SR Centre for Economic Policy Research Discussion Paper: 1767; 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 H55, H62, J26, J30. KW Pensions. Retirement. Wage Level. Budget Deficit. Transition.
AB This paper studies the role of wage and pension pressures in explaining the budget deficit crisis of 1991-2 after the remarkable 1990 Polish economic stabilization and liberalization. It also explains the persistence of the high tax wedge that later helped overcome the budget crisis. The positive revenue effect of higher wages and higher tax rates could not compensate both the inevitable profit tax loss and the excessive growth of replacement income expenditure. Counterfactuals are constructed for revenue and expenditure. They show that the rising number of social benefit earners (pensions, unemployment) is responsible for a large part of the budgetary burden. Nevertheless, they also show that the better protection of social income compared to other income also explains part of the burden. Part of the employment loss and of the social expenditure can be ascribed to the excessive wage recovery of late 1990 and 1991.

De Fraja, Gianni
PD January 1998. TI The Design of Optimal Education Policies. AA University of York. SR Centre for Economic Policy Research Discussion Paper: 1792; 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 D82, H21, H52, I22, I28. KW Education. Student Loans. Tuition Fees. Redistribution. Private Information.
AB The paper studies the optimal education policy of a budget-constrained utilitarian government. Households differ in their income and in the intellectual ability of their children; income is observed by the government, but ability is private information. Households can choose to use private education, but cannot borrow to finance it. The results we obtain are striking. The optimal education policy is elitist: it increases the spread between the education achievement of the bright and the less bright children, compared to both private provision and the first-best policy. It is also such that the education received by a child depends positively on their parental income, unless they are bright. Finally, the optimal education policy is input regressive, in the sense of Arrow (1971): households with higher income and brighter children contribute less towards the cost of the education system than households with lower income and less bright children.

De Grauwe, Paul
PD January 1998. TI Stochastic Process Switching and Stage III of EMU. AU De Grauwe, Paul; Dewachter, Hans; Veestraeten, Dirk. AA Katholieke Universiteit Leuven. SR Centre for Economic Policy Research Discussion Paper: 1783; 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 F31, F33. KW Stage III. Process Switching. European Monetary Union. Conversion Rates. Foreign Exchange.
AB In this paper we solve a particular type of stochastic

process switching problem where the terminal date is fixed but the terminal price may depend on past prices. We apply this framework to the effect of various conversion modalities currently discussed on exchange rate dynamics in the transition phase towards Stage III of EMU. The conclusions from our analysis may provide guidelines not only for the initial EMU members, but also for the countries that join at a later stage.

de la Fuente, Angel

PD December 1997. **TI** Fiscal Policy and Growth in the OECD. **AA** Instituto de Analisis Economico, Barcelona. **SR** Centre for Economic Policy Research Discussion Paper: 1755; 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** E62. O40. **KW** Growth. Fiscal Policy. Public Investment.

AB This paper investigates the impact of public expenditures and taxation on economic growth using panel data for a sample of OECD countries. The empirical results suggest that fiscal policy influences growth through three main channels. First, the government contributes directly to factor accumulation through public investment in infrastructure and other assets. Second, public expenditure tends to crowd out private investment by reducing disposable income and the incentive to save. Third, there is evidence of a sizable negative "externality" effect of government on the level of productivity. According to the estimates, the effective cost of $1 of public expenditure is around $1.3 once the relevant distortions are taken into account. While this figure is viewed as an upper bound, it does suggest that taxes and public expenditures generate significant efficiency costs which should be taken into account when making budget decisions.

PD December 1997. **TI** The Sources of Irish Growth. **AU** de la Fuente, Angel; Vives, Xavier. **AA** de la Fuente: Instituto de Analisis Economico, Barcelona. Vives: Harvard University. **SR** Centre for Economic Policy Research Discussion Paper: 1756; 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** E60, L40, O40, O52. **KW** Ireland. Growth. Competition Policy.

AB This paper explores the sources of Ireland's relative growth performance. Using panel data for a sample of OECD countries, we estimate a convergence equation and use it to conduct a growth accounting exercise which provides quantitative estimates of the immediate sources of Ireland's growth differential vis-a-vis the OECD average and the other "cohesion" countries of the EU. While we find that fiscal consolidation has contributed significantly to Ireland's improved performance, we are not able to fully account for the "Irish Miracle" in terms of the standard growth theory variables. This finding supports the extended view that some peculiar features of the Irish economy (such as its success in attracting high-quality foreign direct investment) have played a crucial role in recent years. We conclude with some reflections on the need for structural reforms as a way to ensure the sustainability of Ireland's rapid growth.

PD January 1998. **TI** Convergence Equations and Income Dynamics: The Sources of OECD Convergence, 1970-95. **AA** Universidad Autonoma de Barcelona. **SR** Centre for Economic Policy Research Discussion Paper: 1794; 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** O15, O40, O57. **KW** Growth. Convergence. Distribution Dynamics.

AB This paper illustrates how convergence equations can be used to analyze the dynamics of the income distribution, thus overcoming some of the limitations of this methodology noted by Quah. Using panel data for a sample of OECD countries, we estimate a growth equation that relates the growth rate of income per capita to the rates of accumulation of physical, human and technological capital, the share of government expenditures in GDP and the behavior of the labor market, while allowing for the main convergence mechanisms identified in the literature. The estimated model and the underlying data are then used in a convergence accounting exercise, which yields quantitative estimates of the contribution of each of these variables to the relative growth performance of each country and to observed income convergence in the sample.

de la Piedra, Enrique G.

TI Coordination of Monetary and Fiscal Policies. **AU** Laurens, Bernard; de la Piedra, Enrique G.

De Masi, Paula R.

TI Prices in the Transition: Ten Stylized Facts. **AU** Koen, Vincent; De Masi, Paula R.

PD December 1997. **TI** IMF Estimates of Potential Output: Theory and Practice. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/177; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 14. **PR** not available. **JE** E30. **KW** Potential Output. Output Gap.

AB The concepts of potential output and the output gap are central to the IMF's analytical work in providing policy recommendations to member governments. This key role has stimulated research at the IMF to develop and refine estimation techniques. This paper summarizes the methodology and results of IMF research on potential output, which has focused mainly on the industrial countries but more recently has addressed issues related to developing countries and countries in transition. It then discusses the approaches that country desk officers use for operational purposes, and presents estimates of potential output for the major industrial countries.

De Meyer, Bernard

PD February 1997. **TI** The Dual Bounds for the Brownian Games. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9714; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 8. **PR** $100 per year. **JE** C60, C70, G10. **KW** Brownian Games. Martingales. Dual Bounds.

AB Let S denote the set x in R dimension K such that for every k and k prime, x subscript k is greater than or equal to zero and x subscript k prime is greater than or equal to zero. For a point x an element of S, a subspace A of R dimension KxI and an I dimensional Brownian motion W, we denote by Q(S, A, x) the set of the S-valued local martingales Y := x + the integral of A subscript t dW subscript t where A is an A-valued

progressively measurable process. The main results state that Q(S, A, x) is uniformly bounded in L superscript alpha for an alpha in (0,1) under the additional hypothesis: for all A in A, for all p in R dimension K positive - {0}: p transpose A=0 implies A=0. These bounds are derived for their application to the analysis of the so called Brownian games.

PD February 1997. TI Brownian Games: Uniqueness and Regularity Issues. AA Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9715; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 13. PR $100 per year. JE C60, C70, G10. KW Brownian Games. Uniqueness. Regularity. PDE Problem.
AB This paper extends the analysis of the dual Brownian game Y(x,T) initiated in [2]. The existence of a value Z(x,T) for Y(x,T) as well as the existence of optimal strategies was proved there. In this paper the author will prove successively that player 2's optimal strategy is unique, that it depends continuously (even in an Holderian way) on x, and that, under a strict ellipticity condition, the mapping Z(.,T) is C superscript 2,alpha for a strictly positive alpha. Brownian games were essentially introduced to prove the existence of a solution to a non- linear elliptic PDE problem. The regularity of Z proved here joint to the results proved in [2] indicates that Z is the solution to this PDE Problem.

PD July 1997. TI "Cav u" and the Dual Game. AU De Meyer, Bernard; Rosenberg, Dinah. AA De Meyer: Universite Catholique de Louvain. Rosenberg: Laboratoire d'Econometrie de l'Ecole Polytechnique, Paris and Universite Paris X- Nanterre. SR Universite Catholique de Louvain CORE Discussion Paper: 9748; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 10. PR $100 per year. JE C72, D82. KW Repeated Games. Asymmetric Information. Concavification.
AB The authors give an alternative proof of a theorem of Aumann and Maschler [1] that characterizes the limit of the values of finitely repeated games with lack of information on one side as the concavification of the value of the game where none of the players has any information.

De Propris, Lisa
PD May 1997. TI A Model of Flexibility and Production Phase Specialization. AU De Propris, Lisa; Sinclair, P. J. N. AA University of Birmingham. SR University of Birmingham, Department of Economics Discussion Paper: 97/07; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. Website: www.bham.ac.uk/economics. PG 21. PR 2 pounds; no charge to academics. JE D21, D24, L22, L23. KW Output Quantity. Flexibility. Cost Functions. Industrial Districts. Vertical Integration.
AB In this paper the authors present a model in which firms achieve output quantity flexibility by contracting out or outsourcing production activities. The concept of flexibility refers to Stigler (1939), but differently from the Mills and Schumann's model (1985) the authors assume that firms' cost functions depend on the degree of vertical integration. They allow firms to choose strategically their degree of vertical integration according to their flexibility needs. In the one- firm model the authors find that profit maximizing firms choose pairs of (q, X) from a continuum of optimal configurations according to their preference on flexibility and, hence, vertical integration. In the two- firm case they find the equilibrium level of prices in the upstream and downstream markets.

de Walque, Gregory
TI Fiscal Norming of Wages to Promote Employment with Monopoly Unions. AU de Crombrugghe, Alain; de Walque, Gregory.

Debelle, Guy
PD March 1998. TI Preliminary Considerations of an Inflation Targeting Framework for the Philippines. AU Debelle, Guy; Lim, Cheng Hoon. AA Debelle: Reserve Bank of Australia and International Monetary Fund. Lim: International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/39; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 30. PR not available. JE E31, E42, E52. KW Inflation Targeting. Philippines.
AB Monetary policy in the Philippines has had multiple objectives. Moreover, shifts in money demand and the money multiplier have made base money a less reliable anchor for monetary policy. Hence, on present policies, a steady reduction in inflation is not assured, and changes to the monetary policy framework should be considered. This paper reviews the benefits as well as the constraints of an inflation targeting framework and the necessary preconditions -- both in terms of the institutional infrastructure and the appropriate inflation target -- for its successful implementation, including the ability to forecast inflation reasonably well over policy-relevant time horizons.

Degeorge, Francois
TI Earnings Management to Exceed Thresholds. AU Patel, Jayendu; Degeorge, Francois; Zeckhauser, Richard.

Dekel, Eddie
PD January 1998. TI On the Equivalence of Simultaneous and Sequential Binary Elections. AU Dekel, Eddie; Piccione, Michele. AA Dekel: Northwestern University. Piccione: University of Southampton. SR University of Southampton Discussion Papers in Economics and Econometrics: 9801; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.as.uk/discp.html. PG 25. PR on application. JE D72. KW Sequential Voting. Unanimity. Simultaneous Voting. Information.
AB The authors explore sequential voting in symmetric two-option environments. They show that the (informative) symmetric equilibria of the simultaneous voting game are also equilibria in any sequential voting structure. In unanimity games, (essentially) the whole set of equilibria is the same in all sequential structures. The authors also explore the relationship between simultaneous and sequential voting in other contexts. They illustrate several instances where sequential voting does no better at aggregating information than simultaneous voting. The inability of the sequential structure to use additional information in voting models is distinct from that in the herd-

cascade literature.

Den Haan, Wouter J.
PD October 1997. TI Job Destruction and Propagation of Shocks. AU Den Haan, Wouter J.; Ramey, Garey; Watson, Joel. AA University of California, San Diego. SR University of California, San Diego, Department of Economics Working Paper: 97/23; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG 34. PR $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. JE E24, E32, J41. KW Matching Models. Unemployment. Relationships.
AB We develop and quantitatively implement a dynamic general equilibrium model with labor market matching and endogenous job destruction. The model produces a close match with data on job creation and destruction. Cyclical fluctuations in the job destruction rate serve to magnify the effects of productivity shocks as output, as well as making the effects much more persistent. Interactions between household savings decisions and separation decisions in employment relationships play a key role in propagating shocks.

Dewachter, Hans
TI Stochastic Process Switching and Stage III of EMU. AU De Grauwe, Paul; Dewachter, Hans; Veestraeten, Dirk.

Diba, Behzad T.
TI Is the Price Level Determined by the Needs of Fiscal Solvency? AU Canzoneri, Matthew B.; Diba, Behzad T.; Cumby, Robert E.

Diebold, Francis X.
PD January 1998. TI Dynamic Equilibrium Economics: 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: Federal Reserve Bank of Minneapolis and University of Minnesota. Berkowitz: Federal Reserve Board. SR Federal Reserve Bank of Minneapolis Staff Report: 243; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. PG 25. PR no charge. JE C52. KW Dynamic Equilibrium Models. Spectral Methods.
AB We propose a constructive, multivariate framework for assessing agreement between (generally misspecified) dynamic equilibrium models and data, a framework which enables a complete second-order comparison of the dynamic properties of models and data. We use bootstrap algorithms to evaluate the significance of deviations between models and data, and we use goodness-of-fit criteria to produce estimators that optimize economically relevant loss functions. We provide a detailed illustrative application to modeling the U.S. cattle cycle.

Dixon, Huw David
PD March 1998. TI Keeping Up With the Joneses: Competition and the Evolution of Collusion in an Oligopolistic Economy. AA University of York. SR Centre for Economic Policy Research Discussion Paper: 1810; 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 C70, D21, D43, L13. KW Aspirations. Learning. Evolution. Profits. Oligopoly.
AB An economy consists of many duopolistic markets. Firms must earn normal profits in the long run if they are to survive. Normal profits are interpreted as the long-run limit of average profits in the whole economy. We adopt the aspiration based model of firm behavior, and link it to the economy with the requirement that in the long run the profit aspiration must be at least as great as normal profits. We assume that the joint profits can be maximized with symmetric payoffs, and with very few other assumptions are able to show that the (almost) global attractor is the cooperative outcome.

Dolado, Juan J.
PD 1997. TI A Cost-Benefit Analysis of Going From Low Inflation to Price Stability in Spain. AU Dolado, Juan J.; Gonzalez-Paramo, Jose M.; Vinals, Jose. AA Dolado: Universidad Carlos III, Madrid. Gonzalez-Paramo: Universidad Complutense, Madrid. Vinals: Banco de Espana. SR Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9803; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid, Spain. Website: www.bde.es. PG 61. PR Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. JE E31, E52, E61. KW Inflation. Price Stability. Monetary Policy. Spain.
AB One of the most significant economic developments of recent years in industrialized countries has been the increasing orientation of macroeconomic policies--and of monetary policies in particular--to achieving lower inflation rates. This has led to a move from low inflation to price stability in a number of countries and, in particular, in Spain. The purpose of this paper is to provide some empirical evidence on the net economic gains that have been obtained in Spain from achieving inflation rates which are low enough to be considered consistent with a situation of price stability. The authors do this by making a compact and relatively homogeneous empirical comparison of the costs and benefits of achieving price stability. According to their estimates, going from low inflation to price stability in Spain seems to be a worthy enterprise, yielding a permanent net beneficial effect of 0.7 to 1.3% of GDP per year.

Donaldson, John B.
TI Productivity Growth, Consumer Confidence and the Business Cycle. AU Danthine, Jean-Pierre; Donaldson, John B.; Johnsen, Thore.

TI Non-Falsified Expectations and General Equilibrium Asset Pricing: The Power of the Peso. AU Danthine, Jean-Pierre; Donaldson, John B.

Donchev, Doncho S.
PD June 1997. TI Optimal Policies for Investment with Time-Varying Return Distributions. AU Donchev, Doncho S.; Rachev, Svetlosar T.; Steigerwald, Douglas G. AA Donchev and Rachev: Bonn University. Steigerwald: University of California, Santa Barbara. SR University of California, Santa Barbara, Working Papers in Economics: 09/97; Department of Economics, University of California, Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. PG 40. PR no charge. JE C44, G11. KW Learning.

Stochastic Optimal Control.
AB We develop a model in which investors must learn the distribution of asset returns over time. The process of learning is made more difficult by the fact that the distributions are not constant through time. We consider risk-neutral investors who have quadratic utility and are selecting between two risky assets. We determine the time at which it is optimal to update the distribution estimate and hence, alter portfolio weights. Our results deliver an optimal policy for asset allocation, that is, the sequence of time intervals at which it is optimal to switch between assets, based on stochastic optimal control theory. In addition, we determine the time intervals in which asset switching leads to a loss with high probability. We provide estimates of the effectiveness of the optimal policy.

Dore, Ousmane
TI Generational Accounting for France. AU Levy, Joaquim; Dore, Ousmane.

Dornbusch, Rudiger
PD February 1998. TI A Red Letter Day? AU Dornbusch, Rudiger; Favero, Carlo A.; Giavazzi, Francesco. AA Dornbusch: Massachusetts Institute of Technology. Favero and Giavazzi: IGIER, Universita Bocconi, Milano. SR Centre for Economic Policy Research Discussion Paper: 1804; 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 E52, E58, F33. KW European Monetary Union. Central Banks. Credit Channel. Monetary Conditions Index.
AB This paper discusses a number of issues that the newly constituted board of the European Central Bank (ECB) will face early on. The authors show how conducting a European monetary policy is very different from living under the protective umbrella of the Bundesbank. They discuss voting on the ECB board, and argue that the ability to communicate to the public will be a critical factor for the success of the new institution. They also ask how a single monetary policy is transmitted to the economy of the member countries. The authors show that the monetary process differs significantly inside EMU: initially, at least, the cost of a disinflation episode could thus fall very unequally on a few member countries because they have a combination of a financial structure that spreads a monetary contraction widely, and a wage-price structure that is relatively inflexible.

Driffill, John
PD February 1998. TI Product Market Integration and Wages: Evidence From a Cross-Section of Manufacturing Establishments in the United Kingdom. AU Driffill, John; Ulph, Alistair; Meschi, Meloria. AA Driffill and Ulph: University of Southampton. Meschi: University of Southampton and South Bank University. SR Centre for Economic Policy Research Discussion Paper: 1818; 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 E24, F15, J23, J31, J51. KW Integration. Wages. Unions. Labor Markets. Employment.
AB Theory predicts that when economies become more integrated through the removal of tariff and other barriers to trade, resulting in an increase in competition in product

markets, there should be effects on wage and employment outcomes in labor markets, particularly those in which unions are active. We investigate this idea empirically using a cross-section of UK manufacturing establishments from the 1990 WIRS data set. A reduction in non-tariff barriers from high to medium leads to lower wages, particularly for unskilled workers. Further reductions in non-tariff barriers produce a less well-determined effect. Intra- industry trade flows relative to sales, which are also used as a proxy for international integration, do not appear to affect wages so markedly.

Dusek, Libor
TI Fact-Finding Efficiency in Legal Procedure: An Experimental Comparison of Adversarial Versus Inquisitorial Regimes. AU Block, Michael; Parker, Jeffrey S.; Vyborna, Olga; Dusek, Libor.

Dziobek, Claudia
PD December 1997. TI Lessons From Systemic Bank Restructuring: A Survey of 24 Countries. AU Dziobek, Claudia; Pazarbasioglu, Ceyla. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/161; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 29. PR not available. JE E44, E58, G28. KW Banks. Rescues. Restructuring.
AB In recent decades, a wide range of countries have experienced banking problems. Their approaches to systemic bank restructuring have varied substantially. This paper analyzes a representative sample of 24 countries and provides a summary of policies judged to be successful. The sample countries were ranked by relative progress in resolving banking sector problems. Based on this ranking, the paper examines the effectiveness of institutional and regulatory measures, assesses the impact of accompanying macroeconomic policies, and examines the extent to which particular restructuring instruments contributed to success. Special emphasis is given to the role of the central bank.

Easterly, William
TI Public Goods and Ethnic Divisions. AU Alesina, Alberto; Baqir, Reza; Easterly, William.

Echeverria, Claudia
TI Sequencing Capital Account Liberalization: Lessons From the Experiences in Chile, Indonesia, Korea, and Thailand. AU Johnston, R. Barry; Darbar, Salim M.; Echeverria, Claudia.

Eckstein, Zvi
TI Transaction Services, Inflation, and Welfare. AU Aiyagari, S. Rao; Braun, R. Anton; Eckstein, Zvi.

Edwards, T. Huw
TI The Welfare Effects of Removing the West German Hard Coal Subsidy. AU Clarke, Rosemary; Edwards, T. Huw.

Eichengreen, Barry
PD February 1998. TI Winning the War, Losing the Peace? Britain's Post-War Recovery in a West German Mirror. AU Eichengreen, Barry; Ritschl, Albrecht. AA Eichengreen: University of California, Berkeley and International Monetary Fund. Ritschl: Universitat Pompeu

Fabra, Barcelona. **SR** Centre for Economic Policy Research Discussion Paper: 1809; 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** N14, O57. **KW** Post-War Growth. Reconstruction. Institutions. Britain. Germany.

AB This paper places Anglo-German growth after World War II in a long- term comparative perspective. Reviewing explanations of why post-war Germany is more dynamic than Britain, we evaluate arguments stressing institutional change, catching-up, and country-specific long-term experience. Examining competition policy and macroeconomic demand management, we find only a limited role for institutional changes and an impressive degree of institutional continuity in each country. Likewise, in inter-temporal perspective the scope for catching up between Germany and Britain is unimpressive. We find growth and productivity differences to be rooted in each country's starting position relative to its own steady state. During the 1950's, the British economy grows along a steady state established between the wars, while the German economy experiences a very pronounced rebound effect from the war shock. After its return to the steady state, German growth performance is very similar to that of Britain and by no means more impressive.

Engle, Robert F.

PD February 1997. **TI** Conditional Volatility of Exchange Rates Under a Target Zone. **AU** Engle, Robert F.; Gau, Yin-Feng. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 97/06; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 16. **PR** $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. **JE** F31. **KW** Exchange Rates. ARCH/GARCH. Target Zones.

AB To study the impact of institutional features of target zones on the conditional volatility of exchange rates, this paper proposes a simple and intuitive model to incorporate the announced information in the bands. Observing the statistical characteristics of the EMS cross rate returns- mean reversion and heteroskedasticity, we fit a GARCH(1,1)- MA(1) specification incorporating the deviation of exchange rates from the central parity. This model allows us to easily examine the relationship between the conditional volatility and the position of spot rates. We find in particular, that for the Irish punt and Italian lira DM rates, the conditional volatility increases as the exchange rate approaches the edges of the band. We extend the above univariate model to a multivariate setting to take account of the cross country interactions in the EMS, by including a vector consisting of all EMS currencies' positions in the GARCH equation. The estimation results show that other currencies' positions do affect the conditional volatility of a specific EMS currency. Understanding the importance of intra-ERM coherence and the multilateral commitment on the central parity, we follow Pill(1994) to derive an "effective band" model to examine how the multilateral grid affects the conditional volatility.

TI Option Hedging Using Empirical Pricing Kernels. **AU** Rosenberg, Joshua V.; Engle, Robert F.

PD November 1997. **TI** Measuring, Forecasting and

Explaining Time Varying Liquidity in the Stock Market. **AU** Engle, Robert F.; Lange, Joe. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 97/12R; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 18. **PR** $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. **JE** G14. **KW** Financial Markets. Liquidity. Market Microstructure.

AB The paper proposes a new measure of market liquidity, VNET, which directly measures the depth of the market. VNET is constructed from the excess volume of buys or sells during a market event defined by a price movement. As this measure varies over time, it can be forecast and explained. Using NYSE TORQ data, it is found that market depth varies positively but less than proportionally with past volume and negatively with the number of transactions. Both findings suggest that over the day high volumes are associated with an influx of informed traders and reduce market liquidity. The timing of events plays an intimate role in the analysis. High expected volatility as measured by the ACD model of Engle and Russell (1997) reduces expected liquidity. Finally, market depth is smaller when the one-sided trading volume is transacted in a shorter than expected time, providing an estimate of the value of patience.

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

Enoch, Charles

PD December 1997. **TI** Some Issues in the Design of Monetary Instruments for the Operation of European Economic and Monetary Union. **AU** Enoch, Charles; Hilbers, Paul; Kovanen, Arto. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/178; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 23. **PR** not available. **JE** E52, E58. **KW** Monetary Operations. EMU.

AB The European Monetary Institute has been working with national central banks of the European Union (EU) to prepare instruments for the operation of monetary policy in Stage 3 of European Economic and Monetary Union. Several publications describing the proposed arrangements have been issued. This paper briefly summarizes the arrangements and identifies some areas in which important decisions still have to be made or refinements introduced -- including the choice of counterparties in fine-tuning open market operations; the design of reserve requirements; the signaling function of monetary operations; and payment system relationships with non-EMU participants in the EU.

Entorf, Horst

TI New Technologies, Wages and Worker Selection. **AU** Kramarz, Francis; Entorf, Horst; Gollac, Michel.

Epstein, Gil S.

PD January 1998. **TI** Creating Illegal Immigrants. **AU** Epstein, Gil S.; Hillman, Arye L.; Weiss, Avi. **AA** Bar-Ilan University. **SR** Centre for Economic Policy Research Discussion Paper: 1796; 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 F22, J61, O15. KW Guest Workers. Illegal Migration. Migration Policy. Employment.
AB Governments have rarely been successful in adhering to intended consequences of temporary guest-worker policies. The conduit for legal entry of workers has resulted in a population of illegal workers, as the initially legal workers make the move to illegal employment. In this paper we examine the effectiveness of instituting a bond which seeks to make the legal employer the enforcement agent of the government. Our model shows how the bond affects the wage differential between legal and illegal employment of migrant workers, and thereby the incentives for transfer from legal to illegal employment and the extent to which workers remain illegally.

PD February 1998. TI Herd Effects and Migration. AU Epstein, Gil S.; Hillman, Arye L. AA Bar-Ilan University. SR Centre for Economic Policy Research Discussion Paper: 1811; 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 F22, J61. KW Migration. Network Externalities. Clustering. Herd Behavior.
AB In this paper we introduce the notion of herd effects or information cascades into models of migration-related phenomena. We consider individuals making sequential decisions regarding emigration. Each individual receives a signal which conveys private information regarding preferred locations abroad, and also observes the decisions made by previous emigrants. The herd behavior which ensues gives rise to geographical concentration in host countries of immigrants from the one location. We show how herd effects can be expected to have both efficiency and political-economy consequences. We expect international factor allocation predicated on herd effects to be inefficient. Herd effects can also be the source of social tensions when the host country's resident population is xenophobic. In general, herd effects can lead to incorrect personal location decisions, since people are led to discount their private information. We also compare herd effects with the network-externalities explanation of immigrant concentration.

PD February 1998. TI The King Never Emigrates: Political Culture and the Reluctant International Movement of People. AU Epstein, Gil S.; Hillman, Arye L.; Ursprung, Heinrich W. AA Epstein and Hillman: Bar-Ilan University. Ursprung: University of Konstanz. SR Centre for Economic Policy Research Discussion Paper: 1815; 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 F22, H20, J61, P40. KW Migration. Contests. Privilege Seeking. Monarchy.
AB We consider a country where a king assigns benefits in accordance with privilege determined by the population's proximity to the throne. People have different relative advantages in seeking privilege and in productive activity. The nature of the contest for privilege determines whether, in equilibrium, the more productive or less productive in society are located closer to the king, and thus who has an incentive to emigrate. When contests for privilege are "easy", the more productive are furthest from the king and emigrate first. When contests are "difficult", the least productive emigrate first. In either case, the population unravels, although emigration is bounded.

Erosa, Andres
TI Private Money and Reserve Management in a Random Matching Model. AU Cavalcanti, Ricardo de O.; Erosa, Andres; Temzelides, Ted.

Errico, Luca
PD March 1998. TI Islamic Banking: Issues in Prudential Regulations and Supervision. AU Errico, Luca; Farahbaksh, Mitra. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/30; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 32. PR not available. JE E58, G18, P51. KW Islamic Banking. Prudential Regulations. Banking Supervision.
AB This paper analyzes the implications of Islamic precepts on banks' structure and activities, focusing on banking supervision issues. It points out and discusses these issues in the context of a paradigm version of Islamic banking, as well as in frameworks that fall between the paradigm version and conventional banking. The case of Islamic banks operating in a conventional system is also examined.

Escriva, Jose Luis
TI The Controllability of a Monetary Aggregate in EMU. AU Cabrero, Alberto; Escriva, Jose Luis; Munoz, Emilio; Penalosa, Juan.

Fampa, Marcia
TI Using Continuous Nonlinear Relaxations to Solve Constrained Maximum- Entrophy Sampling Problems. AU Anstreicher, Kurt M.; Fampa, Marcia; Lee, Jon; Williams, Joy.

Farahbaksh, Mitra
TI Islamic Banking: Issues in Prudential Regulations and Supervision. AU Errico, Luca; Farahbaksh, Mitra.

Favero, Carlo A.
TI A Red Letter Day? AU Dornbusch, Rudiger; Favero, Carlo A.; Giavazzi, Francesco.

Feenstra, Robert C.
PD May 1997. TI Testing Endogenous Growth in South Korea and Taiwan. AU Feenstra, Robert C.; Madani, Dorsati; Yang, Tzu-Han; Liang, Chi-Yuan. AA Feenstra: University of California, Davis and National Bureau of Economic Research. Madani: The World Bank. Yang: Council for Economic Development, Taiwan. Liang: Academia Sinica, Taiwan. SR National Bureau of Economic Research Working Paper: 6028; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 25. PR $5.00. JE F14, F43, O47, O53. KW International Trade. Investment. Endogenous Growth. Productivity. Product Variety.
AB The authors evaluate the endogenous growth hypothesis using sectoral data for South Korea and Taiwan. Their empirical work relies on a direct measure of the variety of products from each sector which can serve as intermediate inputs or as final goods. They test whether changes in the variety of these inputs, for Taiwan relative to Korea, are correlated with the growth in total factor productivity (TFP) in each sector, again measured in Taiwan relative to Korea. The

authors find that changes in relative product variety (entered as a lag or a lead) have a positive and significant effect on TFP in eight of the sixteen sectors. Seven out of these eight sectors are secondary industries, in that they rely on differentiated manufactured inputs, and therefore seem to fit the idea of endogenous growth. Among the primary industries that rely more heavily on natural resources, the authors find more mixed evidence.

Fehr, Ernst

TI   A Theory of Fairness, Competition and Cooperation.
AU   Schmidt, Klaus M.; Fehr, Ernst.

Feldman, Maryann P.

PD   May 1997. TI   The Impact and Organization of Publicly-Funded Research and Development in the European Community. AU   Feldman, Maryann P.; Lichtenberg, Frank R. AA   Feldman: Institute for Policy Studies. Lichtenberg: Columbia University and National Bureau of Economic Research. SR   National Bureau of Economic Research Working Paper: 6040; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG   not available. PR $5.00. JE   H50, L30, L52, O31, O32. KW   Productivity. Research and Development. Europe. Public Funding.
AB   This paper examines R&D activities in the European Community using the Community R&D Information Service (CORDIS) databases. The authors find that a country's private companies tend to be specialized in the same scientific fields as its universities and public organizations. In addition, the authors construct indicators of the degree of R&D tacitness and find that greater expected ability to communicate research outcomes encourages less centralized R&D programs. Programs that yield tangible results are less geographically and administratively centralized. The more that research leads to codifiable knowledge, the less centralized R&D activity needs to be.

Fielding, A.

PD   November 1997. TI   The Consequences of Drop-Outs on the Cost-Effectiveness of 16-19 Colleges. AU   Fielding, A.; Belfield, C. R.; Thomas, H. R. AA   University of Birmingham. SR   University of Birmingham, Department of Economics Discussion Paper: 97/15; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. Website: www.bham.ac.uk/economics. PG   32. PR   2 pounds; no charge to academics. JE   I21, I22, I28. KW   Education. Non-Retention Courses. Cost Effectiveness. Hierarchical Logit. Drop Outs.
AB   The extent of non-retention on post compulsory full-time education courses has become recognized as relatively large. Not the least of the concerns surrounding this, is the extent of resources devoted to initial enrollments on courses who ultimately do not achieve any level of certified outcome. In this paper the authors examine the extent of this problem for GCE Advanced Level courses in a number of colleges in the further education funded sector. By focusing on teaching groups the authors are available to derive a bottom-up approach to an examination of this resource issue both in absolute terms and implications for internal resource allocation. They also identify prior achievements of enrollments as a major factor related to non-retention on courses. They also address the problem of

students dropping out of full-time post school education entirely and conclude that the phenomenon of enrollment loss is directly related to this problem.

PD   December 1997. TI   An Investigation of Performance and Cost-Effectiveness in GCE A-Level Provision in the FEFC Funded Sector. AU   Fielding, A.; Belfield, C. R.; Thomas, H. R. AA   University of Birmingham. SR   University of Birmingham, Department of Economics Discussion Paper: 97/14; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. Website: www.bham.ac.uk/economics. PG   40. PR   2 pounds; no charge to academics. JE   I21, I22, I28. KW   Multilevel Models. Cost-Effectiveness. Class Size. Education. Value- Added.
AB   The authors explore the cost-effectiveness of provision of General Certificate of Education at Advanced Level in a survey of nine colleges receiving central support from the Further Education Funding Council. From a bottom up approach to resource outlay and based on timetables and relevant cost data it is possible to allocate real costs to the subject teaching groups. Through multilevel models of individual performance the authors derive adjusted value-added measures at both the institutional level and teaching group level. Cost-effectiveness ratios of per capita costs to performance are formulated, facilitating a study of factors affecting intra-institutional variations in addition to comparisons across institutions. The authors revisit the question of teaching group size. It is concluded that, although there is considerable scope for improving cost-effectiveness through increased numbers in groups, in the context of colleges and from the data collected this does not appear to have a deleterious effect on performance.

Fleurbaey, Marc

PD   January 1997. TI   Intertemporal Equity and the Extension of the Ramsey Criterion. AU   Fleurbaey, Marc; Michel, Philippe. AA   Fleurbaey: Universite de Cergy-Pontoise. Michel: Universite de la Mediterrance. SR   Universite Catholique de Louvain CORE Discussion Paper: 9704; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG   33. PR $100 per year. JE   D91, E21. KW   Intergenerational Consumption. Social Ordering. Ramsey Criterion. Filters. Equity.
AB   The authors examine social orderings applied to infinite intergenerational consumption paths. Basic dilemmas between several reasonable axioms lead to a taxonomy and characterization of different kinds of orderings, some of which are well known extensions of the Ramsey criterion. The authors show how filters and ultrafilters can be used to understand the general structure of these extensions and to construct orderings which meet as many axioms as possible.

Fogarty, Michael S.

TI   Evidence from Patents and Patent Citations on the Impact of NASA and Other Federal Labs on Commercial Innovation.
AU   Jaffe, Adam B.; Fogarty, Michael S.; Banks, Bruce A.

Folkerts-Landau, David

PD   November 1997. TI   Wholesale Payments and Financial Discipline, Efficiency, and Liquidity. AA   International Monetary Fund. SR   International

Monetary Fund Working Paper: WP/97/154; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 27. **PR** not available. **JE** E50. **KW** Payment Systems. Monetary Policy. Banking.
AB Properly designed wholesale payments system can make a significant contribution to enhancing market discipline in the financial sector, reducing the risk of systemic disturbance and permitting a less extensive safety net for financial institutions. The objective of these reforms has been to achieve a reduction of the credit risk associated with the growth in intraday credit exposures that arises in net settlement systems and in real-time gross systems when the central bank provides daylight overdrafts. Intraday payments-related credit in net settlement systems has been reduced by restructuring payment systems into real-time gross settlement systems with collateralized overdrafts, while in the existing real-time gross settlement systems, the risk- abatement program currently in effect has taken the form of caps and charges on uncollateralized daylight credit.

TI Risk Management of Sovereign Assets and Liabilities.
AU Cassard, Marcel; Folkerts-Landau, David.

Ford, J. L.
TI FDI, Policy Adjustment and Endogenous Growth: Multiplier Effects from a Small Dynamic Model for Taiwan 1959-1995. **AU** Bende-Nabende, A.; Ford, J. L.

PD October 1997. **TI** The Targets and Instruments of Monetary Control: Long-Run Trade-Offs, Multiplier Effects, and Central Bank Preferences, Taiwan 1955-1995. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics Discussion Paper: 97/21; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. Website: www.bham.ac.uk/economics. **PG** 25. **PR** 2 pounds; no charge to academics. **JE** E52, E58. **KW** Monetary Policy. Central Banks. Inflation. Taiwan.
AB This paper provides a preliminary investigation of the monetary instruments used by the central bank of China, Taiwan. Final and intermediate targets are identified. An illustrative estimate of the weights that the central bank might attach to its targets is provided, and long-run trade-offs between policies (the instruments) and the targets of policy are evaluated. So too are monetary policy multipliers. The evidence points to the paramount importance attached to the control of inflation.

TI Market Structure, Concentration and Performance: Jordanian Banking System, 1980-1993. **AU** Al-Karasneh, Ibrahim; Cadle, P. J.; Ford, J. L.

TI The Impact of FDI and Regional Economic Integration on the Economic Growth of the ASEAN-5 Economies, 1970-1994: A Comparative Analysis from a Small Structural Model. **AU** Bende-Nabende, A.; Ford, J. L.; Slater, J. R.

PD November 1997. **TI** Output, the Price Level, Broad Money, and Divisia Monetary Aggregates With and Without Innovation: Taiwan, 1967(1) -- 1995(4). **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics Discussion Paper: 97/17; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. Website: www.bham.ac.uk/economics. **PG** 43. **PR** 2 pounds; no charge to academics. **JE** E31, E40, E51, E58, G21.

KW Monetary Aggregates. Financial Innovation. Cointegration. Causality. Error Correction.
AB This paper considers the relationship between output, the price level and the Central Bank's broad money aggregate, M2. The authors consider by way of comparison a Divisia index, which is adjusted to allow for the financial liberalization that Taiwan has (possibly) nominally experienced since the end of the 1970's. The comparison initially is effected by using the modern techniques of integration, cointegration and error correction modeling. No cointegration is found to exist for any monetary aggregate and, separately, output and the price level. For both of those variables cointegration is discovered for real M2, and the innovation Divisia aggregates. Granger-causality VAR's were estimated for the alternative monetary aggregates. M2 (M2 growth) and the price level (inflation) appear to jointly cause each other. The evidence is suggestive of bi-directional causality between inflation, and the growth of both Divisia and one of its innovation variants.

TI The Impact of FDI on the Economic Growth of the ASEAN-5 Economies, 1970-94: A Comparative Dynamic Multiplier Analysis from a Small Model with Emphasis on Liberalisation. **AU** Bende-Nabende, A.; Ford, J. L.; Slater, J. R.

PD December 1997. **TI** Economic Development, Financial Development and Liberalisation: Taiwan, 1960-1995. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics Discussion Paper: 97/25; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. Website: www.bham.ac.uk/economics. **PG** 35. **PR** 2 pounds; no charge to academics. **JE** E44, O16. **KW** Development. Financial Liberalization. Causality. Cointegration. Taiwan.
AB This paper considers the causal relationship between economic and financial development, making some allowance for financial liberalization. The measures of financial development (and variants thereof) advocated in the literature are utilized, supplemented by some simple "quantitative" measures. The evidence from cointegration and ECM modeling is that both a measure of magnetization and of financial assets to GNP 'cause' economic development, represented by GNP per capita. Since cointegration could only be discovered for lag length one for both indicator's of financial development, VAR's were formed to test for Granger "causality"; and these corroborated the findings of the integration and ECM modeling. "Causality" was found to exist from one of the quantitative measures of financial development and the broad measure of financial development, by means of integration and Granger causality. These linkages held over the entirety of the data period; no acceptable cointegration was discerned for the pre- and post- liberalization periods.

Foucault, Thierry
PD February 1998. **TI** Order Flow Composition and Trading Costs in Dynamic Limit Order Markets. **AA** Universitat Pompeu Fabra and Carnegie Mellon University. **SR** Centre for Economic Policy Research Discussion Paper: 1817; 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** C72, D44, G19. **KW** Market Microstructure. Limit Orders. Market Orders. Bid-Ask Prices. Order Flow

Composition.
AB This paper provides a game theoretic model of price formation and order placement decisions in a dynamic limit order market. Investors can choose to post limit orders or to submit market orders. Limit orders result in better execution prices but face a risk of non-execution and a winner's curse problem. The execution probability of a limit order trader is endogenous and depends on the order placement decisions of the other traders. Solving for the equilibrium of this dynamic game, closed form solutions for the order placement strategies are obtained. Thus, testable implications for the cross-sectional behavior of the mix between market and limit orders and trading costs in limit order markets are derived. It is also shown that the winner's curse problem has a negative impact on the allocative efficiency of these markets.

Francois, Joseph F.
TI Commercial Links Between Western Europe and East Asia: Retrospect and Prospects. AU Anderson, Kym; Francois, Joseph F.

PD March 1998. TI A Geometry of Specialization. AU Francois, Joseph F.; Nelson, Douglas. AA Francois: Erasmus University Rotterdam. Nelson: Tulane University. SR Centre for Economic Policy Research Discussion Paper: 1813; 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, L23, O12, O41. KW Specialization. Trade. Development. Industry Location. Agglomeration.
AB Division of labor models have become a standard analytical tool, along with competitive general equilibrium models (Ricardian, HOS, Ricardo-Viner), in public finance, trade, growth, development and macroeconomics. Yet unlike the earlier models, specialization models lack a canonical representation. This is because they are both new and complex, characterized by multiple equilibria, instability and emergent structural properties under parameter transformation. We develop a general framework for such models, illustrating results from current research on specialization models, and explaining why one sub-class of these models is particularly difficult to illustrate easily.

Frank, Murray
PD March 1997. TI Why Do Stock Prices Drop by Less than the Value of the Dividend? Evidence from a Country Without Taxes. AU Frank, Murray; Jagannathan, Ravi. AA Murray: University of British Columbia. Jagannathan: Federal Reserve Bank of Minneapolis and University of Minnesota. SR Federal Reserve Bank of Minneapolis Staff Report: 229; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. PG 27. PR no charge. JE G12, G35. KW Asset Pricing. Dividends. Bid-Ask Spread. Market Microstructure.
AB It is well documented that on average, stock prices drop by less than the value of the dividend on ex-dividend days. This has commonly been attributed to the effect of tax clienteles. We use data from the Hong Kong stock market where neither dividends nor capital gains are taxed. As in the U.S.A. the average stock price drop is less than the value of the dividend; specifically, in Hong Kong the average dividend was HK $0.06. We are able to account for this both theoretically and empirically through market microstructure based arguments.

Frankel, Jeffrey
PD February 1998. TI Open Regionalism in a World of Continental Trade Blocs. AU Frankel, Jeffrey; Wei, Shang-Jin. AA Frankel: University of California, Berkeley. Wei: Harvard University. SR International Monetary Fund Working Paper: WP/98/10; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 17. PR not available. JE F15. KW Open Regionalism. Trade Blocs. The McMillan Criterion.
AB Continental trade blocs are emerging in many parts of the world almost in tandem. If trade blocs are required to satisfy the McMillan criterion of not lowering trade volume with outside countries, they have to engage in a dramatic reduction of trade barriers against non-member countries. That may not be politically feasible. On the other hand, in a world of simultaneous continental trade blocs, an open regionalism in which trade blocs undertake relatively modest external liberalization can usually produce Pareto improvement.

Frech, H. E., III
PD December 1996. TI The Productivity of Health Care and Pharmaceuticals: An International Comparison. AU Frech, H. E., III.; Miller, Richard D., Jr.. AA University of California, Santa Barbara. SR University of California, Santa Barbara, Working Papers in Economics: 05/97; Department of Economics, University of California, Santa Barbara, CA 93106. Website: http://www.econ.ucsb.edu/. PG 51. PR no charge. JE I12, I31, L65. KW Determinants of Health. International Comparisons. Pharmaceuticals. Life Expectancy.
AB Much work has been done analyzing the determinants of health care expenditures. Much less effort has been devoted to analyzing the determinants of health itself. The focus of the analysis presented here is the production of health, with special attention paid to disaggregating health into pharmaceuticals and other health care. We also analyze the effects that wealth and certain lifestyle factors have on health. Researchers who have analyzed the determinants of health across geographic units have found certain striking and consistent results. First, basic public health services, in the form of potable water and sanitation services, provide the biggest payoffs in decreased mortality for all age groups. Second, the expansion of health care services does not improve mortality to anywhere near the extent that public health infrastructure development does, if at all. Some researchers have even found positive relationships between some health care inputs and mortality. The results on income and wealth have been more mixed. In studies which have analyzed developing countries, researchers have found that higher incomes are negatively related to mortality. Other researchers have found exactly the opposite result when they have limited their samples to rich countries and/or regions thereof.

Freeman, Richard B.
PD April 1997. TI Spurts in Union Growth: Defining Moments and Social Processes. AA Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6012; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 63. PR $5.00. JE E32, J51, N32. KW Labor Studies. Unions. Great Depression.
AB This paper examines the spurt in U.S. unionism during

the Great Depression. It argues that the Depression spurt is better understood as resulting from a Depression sparked endogenous social process than from New Deal legislation and Congress of Industrial Organizations (CIO) leadership. Several pieces of evidence are offered for this interpretation: 1. The ubiquity of spurts in unionization across countries, particularly in the Depression. 2. The widespread use of recognition strikes during the 1930's spurt. 3. The growth of CIO affiliates with little CIO financial or organizing aid. The author models unionization as the outcome from a conflict between union/worker organizing activity and employer opposition. Union organizing and activity rises with density, then falls with density. Employer opposition is high at low densities but falls once unions gain control of the relevant market. The result is a nonlinear difference equation that produces spurts of union growth.

Friedberg, Leora

PD January 1997. TI The Labor Supply Effects of the Social Security Earnings Test. AA Friedberg: University of California, San Diego. SR University of California, San Diego, Department of Economics Working Paper: 97/01; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG 32. PR $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. JE H55, J14, J22. KW Social Security. Earnings Test. Labor Supply. Aging Economics. Nonlinear Budget Constraint. Natural Experiment. AB The Social Security earnings test reduces a 65-69 year old's benefits at a 33% rate and a 62-64 year old's benefits at a 50% rate once earnings pass a threshold amount among the highest marginal tax rates in the economy. Previous research dismissed the importance of the earnings test, but failed to take advantage of three changes in the earnings test rules over the last twenty years in order to identify its impact. Each change applied to some age groups and not others which make them extremely useful for identifying the effect of tax rules on the labor supply of working beneficiaries. The empirical analysis begins by examining the most unambiguous prediction: beneficiaries should bunch just below the exempt amount, although bunching is not observed in many applications of kinked budget sets. In the Current Population Survey, individuals bunch in substantial numbers just below the convex kink and the bunching shifts with the earnings test rules changes. The shifts in the budget set are then incorporated into a structural model of labor supply to identify income and substitution effects. The estimation yields significant elasticities that suggest considerable deadweight loss suffered by working beneficiaries.

PD June 1997. TI The Effect of Old Age Assistance on Retirement. AA University of California, San Diego. SR University of California, San Diego, Department of Economics Working Paper: 97/14; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG 26. PR $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. JE H53, J14, J22, N32. KW Old Age Assistance. Retirement. Aging Economics. Social Security. AB This paper analyzes the impact of the first means-tested

transfer program for the elderly on retirement behavior. In the literature on retirement a great deal of attention has been devoted to analyzing the role of Social Security since the 1960's, with mixed findings. However, Old Age Assistance (OAA), a means-tested program established in 1935, dwarfed Social Security until the 1950's and coincided with the early decline in elderly participation. In addition, OAA benefit levels were determined by the states -- a key source of policy variation that is missing in the case of Social Security. I estimate the relationship between OAA benefit levels and elderly labor force participation using individual data from the 1940 and 1950 Censuses. The effect of OAA is found to be quite strong -- the estimates imply that participation would barely have declined at all if benefits had not been raised during the 1940's. The estimates naturally suggest a large decline in participation due to rising generosity of Social Security in the following decade. I also offer evidence against the possible endogeneity of state benefit levels.

Froot, Kenneth A.

PD April 1997. TI On the Pricing of Intermediated Risks: Theory and Application to Catastrophe Reinsurance. AU Froot, Kenneth A.; O'Connell, Paul G. J. AA Froot: Harvard University and National Bureau of Economic Research. O'Connell: Harvard University. SR National Bureau of Economic Research Working Paper: 6011; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 36. PR $5.00. JE G12, G22, G24, G31. KW Asset Pricing. Corporate Finance. International Finance. Reinsurance. Financial Intermediaries. AB The authors model the equilibrium price and quantity of risk transfer between firms and financial intermediaries. Value-maximizing firms have downward sloping demands to cede risk, while intermediaries, who assume risk, provide less-than-fully-elastic supply. The authors show that equilibrium required returns will be "high" when financing imperfections that make intermediary capital costly are present. Moreover, financing imperfections can give rise to intermediary market power, so that small changes in financial imperfections can give rise to large changes in price. The authors develop tests of this alternative against the null that the supply of intermediary capital is perfectly elastic. They take the U.S. catastrophe reinsurance market as an example, using data from Guy Carpenter & Co. Their results suggest that the price of reinsurance generally exceeds "fair" values, that market power of reinsurers is not a complete explanation for such pricing, and that reinsurers' high costs of capital play an important role.

PD May 1997. TI The Limited Financing of Catastrophe Risk: An Overview. AA Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6025; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 24. PR $5.00. JE G12, G14, G22, G31. KW Asset Pricing. Corporate Finance. Catastrophe. Reinsurance. Risk Sharing. AB This paper argues that the financial exposure of households and firms to natural catastrophe disasters is borne primarily by insurance companies. Surprisingly, insurers use reinsurance to cover only a small fraction of these exposures, yet many insurers do not have enough capital and surplus to survive medium or large disasters. In a well- functioning financial system, these risks would be more widely shared.

This paper articulates eight different explanations that may lie behind the limited risk sharing, relating them both to recent industry developments and financial theory. The author then examines how financial innovation can help change the equilibrium toward a more efficient outcome.

PD May 1997. TI The Pricing of U.S. Catastrophe Reinsurance. AU Froot, Kenneth A.; O'Connell, Paul G. J. AA Froot: Harvard University and National Bureau of Economic Research. O'Connell: Harvard University. SR National Bureau of Economic Research Working Paper: 6043; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 37. PR $5.00. JE G12, G22, G31. KW Corporate Finance. Catastrophe. Reinsurance. Demand Shocks. Financial Intermediaries.
AB The authors explore two theories that have been advanced to explain the patterns in U.S. catastrophe reinsurance pricing. The first is that price variation is tied to demand shocks, driven in effect by changes in actuarially expected losses. The second holds that the supply of capital to the reinsurance industry is less than perfectly elastic, with the consequence that prices are bid up whenever existing funds are depleted by catastrophe losses. Using detailed reinsurance contract data from Guy Carpenter & Co. over a 25-year period, the authors test these two theories. Their results suggest that capital market imperfections are more important than shifts in actuarial valuation for understanding catastrophe reinsurance pricing. Supply, rather than demand, shifts seem to explain most features of the market in the aftermath of a loss.

Fry, Maxwell J.

PD July 1997. TI Macro-Governance, Capital Inflows and the Real Exchange Rate. AA University of Birmingham. SR University of Birmingham, Department of Economics Discussion Paper: 97/10; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. Website: www.bham.ac.uk/economics. PG 31. PR 2 pounds; no charge to academics. JE F21, F31, F32, F41. KW Exchange Rates. Development. Capital Inflows. Imports. Investment.
AB The author uses an indirect approach to examine the effects of capital inflows on real exchange rates in a sample of 46 developing countries. Distinguishing between autonomous and accommodating capital inflows and disaggregating capital inflows into foreign direct investment, portfolio investment and other capital inflows, the author estimates the effects of these types of capital inflows on domestic capital formation, national saving, imports, exports and growth. In general, autonomous capital inflows increase domestic investment more than accommodating capital inflows. All autonomous capital inflows increase imports more than accommodating capital inflows. A capital inflow that increases the gap between investment and saving by more than it increases the gap between imports and exports exerts upward pressure on the real exchange rate in order to enlarge the gap between imports and exports. Increased foreign direct investment necessitates a real exchange rate appreciation to stimulate imports and increase the import-export gap.

PD July 1997. TI Macro-Governance, Foreign Direct Investment and Vietnam's Current Account Deficit. AA University of Birmingham. SR University of Birmingham, Department of Economics Discussion Paper: 97/11; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. Website: www.bham.ac.uk/economics. PG 39. PR 2 pounds; no charge to academics. JE E62, F21, F32, O11, O53. KW Sustainability. Current Account. Growth. Vietnam. Foreign Direct Investment.
AB Vietnam's current account deficit increased from less than 1 percent of GDP in 1992 to over 11 percent of GDP in 1996. This increased current account deficit has been accompanied by a rapid acceleration in economic growth from 1 percent in 1990 to 9 percent in 1995 and 1996. Were the existing plans to finance only half of Vietnam's domestic investment program averaging some 30 percent of GDP from national saving over the next five years realized, Vietnam's current account deficit would continue to rise, reaching about 15 percent of GDP by 2000. These projections raise the question of sustainability, the subject of this paper. While the author concludes that Vietnam's double-digit current account deficit is sustainable in the foreseeable future since it is financed almost entirely by foreign direct investment, the same sanguine conclusion cannot be made for the continuation of Vietnam's high rate of economic growth.

PD January 1998. TI Macro-Governance, Macroeconomic Policy and Economic Performance: Why Pacific Asia Performs Better. AA University of Birmingham. SR University of Birmingham, Department of Economics Discussion Paper: 98/02; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. Website: www.bham.ac.uk/economics. PG 14. PR 2 pounds; no charge to academics. JE E31, E52, E63, F32, F40. KW Monetary Policy. Fiscal Policy. Deficits. Development. Asia.
AB In this article, the author examines the relationship between monetary and fiscal policies in a panel of 70 developing countries. He finds that the size of the government's deficit and the methods by which it is financed are strongly related to monetary policy reactions to increases in both government credit and net foreign assets. In particular, larger deficits and greater reliance by governments on the domestic banking system are associated with more accommodative monetary policies. In turn, such inflationary macroeconomic policies are associated not only with higher inflation but also with lower economic growth. Five countries in the Pacific Asian region exhibit considerably greater monetary control than a control group of 15 other developing countries. Hence, policy rather than behavior appears to explain the above-average performance in Pacific Asian developing economies.

Fuller, Jeffrey R.

TI Competing Claims to Land: The Sources of Violent Conflict in the Brazilian Amazon. AU Alston, Lee J.; Fuller, Jeffrey R.; Libecap, Gary D.; Mueller Bernardo.

Fullerton, Don

TI Curbside Recycling and Unit-Based Pricing. AU Kinnaman, Thomas C.; Fullerton, Don.

Gable, Jeffery A.

TI International Evidence on the Determinants of Trade Dynamics. AU Prasad, Eswar S.; Gable, Jeffery A.

Galy, Michel
TI   The CFA Franc Zone and the EMU. AU   Hadjimichael, Michael T.; Galy, Michel.

Garcia, Coral
PD   November 1998. TI   Funciones Trimestrales de Exportacion e Importacion Para La Economia Espanola. AU   Garcia, Coral; Gordo, Esther. AA   Banco de Espana. SR   Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9822; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid, Spain. Website: www.bde.es. PG   17. PR   Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. JE   F10, F41, F47. KW   Imports. Exports. Elasticities. Cointegration. Spain.
AB   This paper presents the main results from the estimation of a quarterly econometric model of Spanish exports and imports by using cointegration techniques. The empirical evidence shows the high sensitivity of exports and imports to the evolution of external and internal income, respectively, and the relevance of competitiveness factors, measured by relative prices, in the determination of commercial flows. Besides, the response of exports to changes in demand or in competitiveness is, in the short run, slower than the response of imports.

Garcia-Perea, Pilar
TI   A Comparative Study of the Portuguese and Spanish Labour Markets. AU   Bover, Olympia; Garcia-Perea, Pilar; Portugal, Pedro.

Garratt, Rod
PD   May 1998. TI   On Market Games When Agents Cannot Be Two Places at Once. AU   Garratt, Rod; Qin, Cheng-Zhong. AA   University of California, Santa Barbara. SR   University of California, Santa Barbara, Working Papers in Economics: 07/98; Department of Economics, Working Paper Coordinator, University of California, Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. PG   21. PR   no charge. JE   C71. KW   Coalitional Games. Market Games. Transferable Utility. Superadditive.
AB   We consider markets in which agents supply one unit of time that is equal to the duration of the market. We show that a coalitional game can be generated by such a market if and only if the characteristic function of the game is superadditive. We also characterize the vectors of balancing weights that are associated with feasible plans for forming coalitions in a time-constrained market. These are shown to be the same as the ones generated from a market with indivisible agents and lotteries.

Gau, Yin-Feng
TI   Conditional Volatility of Exchange Rates Under a Target Zone. AU   Engle, Robert F.; Gau, Yin-Feng.

Gaviria, Alejandro
PD   September 1997. TI   School-Based Peer Effects and Juvenile Behavior. AU   Gaviria, Alejandro; Raphael, Steven. AA   University of California, San Diego. SR   University of California, San Diego, Department of Economics Working Paper: 97/21; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG   23. PR $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. JE   Z00. KW   Peer Effects. Youth Outcomes.
AB   We use a sample of tenth-graders drawn from the National Education Longitudinal Survey (NELS) to test for peer-group influences on the propensity to engage in five different activities: drug use, alcohol drinking, cigarette smoking, church going, and the probability that the student will drop out of school in the future. We find strong evidence of peer-group effects at the school level for all activities analyzed. These effects remain after controlling for several personal and school characteristics, family background variables, and several measures of parental behavior and involvement in the youth's daily life. Tests for bias due to endogenous school choice yield mixed results. We find evidence of endogeneity bias for two of the five activities analyzed (drug use and alcohol drinking). On the whole, these results confirm the findings of previous research concerning interaction effects at the neighborhood level.

Geanakoplos, John
PD   June 1998. TI   A Strategic Market Game With Active Bankruptcy. AU   Geanakoplos, John; Karatzas, I.; Shubik, Martin; Sudderth, W. AA   Geanakoplos and Shubik: Yale University. Karatzas: Columbia University. Sudderth: University of Minnesota. SR   Yale Cowles Foundation Discussion Paper: 1183; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. PG   41. PR   no charge up to 3 papers; $3.00 domestic; 4.00 International. JE   C73, D52, E50. KW   Bankruptcy. Central Bank. Money Supply. Price Level. Money Market.
AB   We construct stationary Markov equilibria for an economy with fiat money, one non-durable commodity, countably-many time periods, and a continuum of agents. The total production of commodity remains constant, but individual agents' endowments fluctuate in a random fashion, from period to period. In order to hedge against these random fluctuations, agents find it useful to hold fiat money which they can borrow or deposit at appropriate rates of interest; such activity may take place either at a central bank (which fixes interest rates judiciously) or through a money-market (in which interest rates are determined endogenously). We carry out an equilibrium analysis, based on a careful study of Dynamic Programming equations and on properties of the Invariant Measures for associated optimally-controlled Markov chains. This analysis yields the stationary distribution of wealth across agents, as well as the stationary price (for the commodity) and interest rates (for the borrowing and lending of fiat money). A distinctive feature of our analysis is the incorporation of bankruptcy, both as a real possibility in an individual agent's optimization problem, as well as a determinant of interest rates through appropriate balance equations. These allow a central bank (respectively, a money- market) to announce (respectively, to determine endogenously) interest rates in a way that conserves the total money-supply and controls inflation.

TI   Social Security Money's Worth. AU   Zeldes, Stephen P.; Geanakoplos, John; Mitchell, Olivia S.

PD   September 1998. TI   Would a Privatized Social Security System Really Pay a Higher Rate of Return? AU   Geanakoplos, John; Mitchell, Olivia S.; Zeldes, Stephen P. AA   Geanakoplos: Yale University. Mitchell: University of Pennsylvania. Zeldes: Columbia University. SR   Yale

Cowles Foundation Discussion Paper: 1194; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 32. **PR** no charge up to 3 papers; $3.00 domestic; 4.00 International. **JE** H55. **KW** Social Security.

AB Many advocates of social security privatization argue that rates of return under a defined contribution individual account system would be much higher for all than they are under the current social security system. This claim is false. The mistake comes from ignoring accrued benefits already promised based on past payroll taxes, and from underestimating the riskiness of stock investments. Confusion arises because three distinct reforms are muddled. By privatization we mean creating individual accounts (which could, for example, be invested exclusively in bonds). By diversification we mean investing in stocks, and perhaps other assets, as well as bonds; diversification might be undertaken either by individuals in their private social security accounts, or by the social security trust fund. By prefunding we mean closing the gap between social security benefits promised to date and the assets on hand to pay for them. Any one of these reforms could be implemented without the other two. If the system were completely privatized, with no prefunding or diversification, the social security system would need to raise taxes and/or issue new debt in order to pay benefits already accrued. If the burden were spread evenly across all future generations via a constant proportional tax, the added taxes would completely eliminate any rate of return advantage on the individual accounts.

Genesove, David

PD May 1997. **TI** Predation and Its Rate of Return: The Sugar Industry, 1887-1914. **AU** Genesove, David; Mullin, Wallace P. **AA** Genesove: Massachusetts Institute of Technology and National Bureau of Economic Research. Mullin: Michigan State University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6032; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 34. **PR** $5.00. **JE** L13, L41, N61. **KW** Industrial Organization. Sugar Refining. Predation. Oligopoly. Economic History.

AB The authors study entry into the American sugar refining industry before World War I. They show that the price wars following two major entry episodes were predatory. Their proof is twofold: by direct comparison of price to marginal cost, and by construction of predicted competitive price cost margins that the authors show to exceed observed margins. They argue that predation occurred only when the relative cost of it to the dominant firm was small, and that it was most probably used to deter future capacity additions. It was also used to lower the purchase price of preexisting firms after one entry episode.

Germain, Marc

PD January 1997. **TI** Financial Transfers to Ensure Cooperative International Optimality in Stock Pollutant Abatement. **AU** Germain, Marc; Toint, Philippe L.; Tulkens, Henry. **AA** Germain: Universite Catholique de Louvain. Toint: Facultes Universitaires Notre-Dame de la Paix, Namur. Tulkens: Universite Catholique de Louvain and Facultes Universitaires Saint-Louis, Bruxelles. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9701; Center for Operations Research and Econometrics, Universite

Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 18. **PR** $100 per year. **JE** C71, C73, D62, F42. **KW** Transboundary Pollution. Cooperation. Stability. Transfers. Game Theory.

AB It is well known that the transnational character of many environmental problems requires cooperation amongst the countries involved, if a social optimum is at all to be achieved. Most of the numerous contributions dealing with the problems raised by the cooperation issue bear only on pollutants that do not accumulate: they are thus only relevant in a static, or a-temporal, context. On the other hand, many contributions which deal with the dynamic dimension of the problem when the pollutant accumulates leave aside the issue of the voluntary implementation of the international optimum. The aim of the present contribution is to overtake the two above limitations. Using both cooperative and differential game theories, the authors design a scheme of financial transfers between countries such that aggregate abatement costs are covered in a way that makes cooperation both individually rational and strategically stable.

PD February 1997. **TI** An Iterative Process for International Negotiations on Acid Rain in Northern Europe Using a General Convex Formulation **AU** Germain, Marc; Toint, Philippe L. **AA** Germain: Universite Catholique de Louvain. Toint: Facultes Universitaires Notre-Dame de la Paix, Namur. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9718; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 20. **PR** $100 per year. **JE** C73, D62, F42. **KW** Dynamic Games. Transboundary Pollution. Negotiations. Financial Transfers.

AB This paper proposes a dynamic game theoretical approach of international negotiations on transboundary pollution. This approach is distinguished by a discrete time formulation and by a suitable formulation of the local information assumption on cost and damage functions: at each stage of the negotiation, the parties assign the best possible cooperative state as an objective for the next stage. It is shown that the resulting sequence of states converges from a non-cooperative situation to a Pareto optimum. Furthermore, a financial transfer structure is also presented, which guarantees that the desired sequence of states is individually rational and strategically stable if one starts from a Nash equilibrium. The concepts are applied in a numerical simulation of the sulfur dioxide transboundary pollution problem related to acid rain in Northern Europe. This simulation shows the need for an improved formulation of the financial transfers if one starts from another initial state.

Gerson, Philip

PD January 1998. **TI** The Impact of Fiscal Policy Variables on Output Growth. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/98/01; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 74. **PR** not available. **JE** H20, H50, O23. **KW** Fiscal Policy. Growth. Government Expenditure. Taxation.

AB This paper surveys the theoretical and empirical literature on the relationship between taxation and public expenditure and economic growth. Particular attention is paid to the effect of taxation and government expenditure on the

supply and productivity of labor and physical capital. Studies suggest that well-targeted government expenditures on health, education, and infrastructure should have a positive impact on growth. By contrast, the impact of taxation on the supplies of labor and capital, and on output growth, is more muted.

PD February 1998. TI Poverty, Income Distribution, and Economic Policy in the Philippines. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/20: International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 27. PR not available. JE H20, H50, I30. KW Poverty. Income Distribution. Philippines.
AB Income distribution in the Philippines is highly uneven, and poverty rates are higher than in other ASEAN countries. In addition, although the poverty rate has declined over time, the rate of decline has been slower than in other countries, and income inequality has been persistent. These facts are due to historically slow economic growth, owing in part to poor policies, as well as to past failures to reduce structural impediments to a more equal distribution of income. Despite reforms in recent years, it will likely take some time to erase the effects of past policies.

Gertler, Paul
PD May 1997. TI Insuring Consumption Against Illness. AU Gertler, Paul; Gruber, Jonathan. AA Gertler: University of California 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: 6035; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 43. PR $5.00. JE J22, J24, H53, I18, O15. KW Health Care. Public Economics. Consumption. Development. Illness.
AB One of the most sizable and least predictable shocks to economic opportunities in developing countries is major illness, both in terms of medical care expenditures and lost income from reduced labor supply and productivity. As a result, families may not be able to smooth their consumption over periods of illness. In this paper, the authors investigate the extent to which families are able to insure consumption against major illness using a unique panel data set from Indonesia that combines excellent measures of health status with consumption information. They find that there are significant economic costs associated with these illnesses, albeit more from income loss than from medical expenditures. They also find a robust and striking rejection of full consumption insurance. Indeed, the deviation from full consumption smoothing is significant, particularly for illnesses that severely limit physical function; families are able to smooth less than 30 percent of their income loss.

Geweke, John
PD June 1997. TI An Empirical Analysis of Income Dynamics Among Men in the PSID: 1968-1989. AU Geweke, John; Keane, Michael. AA University of Minnesota and Federal Reserve Bank of Minneapolis. SR Federal Reserve Bank of Minneapolis Staff Report: 233; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. PG 49. PR no charge. JE C11, J31. KW Earnings. Income Mobility. Heterogeneity. Bayesian Inference. Gibbs Sampler. Markov

Chain. Monte Carlo.
AB This study uses data from the Panel Survey of Income Dynamics (PSID) to address a number of questions about life cycle earnings mobility. It develops a dynamic reduced form model of earnings and marital status that is nonstationary over the life cycle. The study reaches several firm conclusions about life cycle earnings mobility. Incorporating non-Gaussian shocks makes it possible to account for transitions between low and higher earnings states, a heretofore unresolved problem. The non-Gaussian distribution substantially increases the lifetime return to post-secondary education, and substantially reduces differences in lifetime wages attributable to race. In a given year, the majority of variance in earnings not accounted for by race, education and age is due to transitory shocks, but over a lifetime the majority is due to unobserved individual heterogeneity. Consequently, low earnings at early ages are strong predictors of low earnings later in life, even conditioning on observed individual characteristics.

PD August 1997. TI Mixture of Normals Probit Models. AU Geweke, John; Keane, Michael. AA University of Minnesota and Federal Reserve Bank of Minneapolis. SR Federal Reserve Bank of Minneapolis Staff Report: 237; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. PG 16. PR no charge. JE C11, C25. KW Discrete Choice. Markov Chain Monte Carlo. Normal Mixture.
AB This paper generalizes the normal probit model of dichotomous choice by introducing mixtures of normal distributions for the disturbance term. By mixing on both the mean and variance parameters and by increasing the number of distributions in the mixture these models effectively remove the normality assumption and are much closer to semiparametric models. When a Bayesian approach is taken, there is an exact finite-sample distribution theory for the choice probability conditional on the covariates. The paper uses artificial data to show how posterior odds ratios can discriminate between normal and nonnormal distributions in probit models. The method is also applied to female labor force participation decisions in a sample with 1,555 observations from the PSID. In this application, Bayes factors strongly favor mixture of normal probit models over the conventional probit model, and the most favored models have mixtures of four normal distributions for the disturbance term.

PD June 1998. TI Using Simulation Methods for Bayesian Econometric Models: Inference, Development, and Communication. AA Federal Reserve Bank of Minneapolis and University of Minnesota. SR Federal Reserve Bank of Minneapolis Staff Report: 249; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. PG 62. PR no charge. JE C11, C15. KW Bayes Factor. Diagnostic Checking. Importance Sampling. Markov Chain Monte Carlo. Model Specification. Prior Distributions.
AB This paper surveys the fundamental principles of subjective Bayesian inference in econometrics and the implementation of those principles using posterior simulation methods. The emphasis is on the combination of models and the development of predictive distributions. Moving beyond conditioning on a fixed number of completely specified models, the paper introduces subjective Bayesian tools for formal comparison of these models with as yet incompletely specified

models. The paper then shows how posterior simulators can facilitate communication between investigators (for example, econometricians) on the one hand and remote clients (for example, decision makers) on the other, enabling clients to vary the prior distributions and functions of interest employed by investigators. A theme of the paper is the practicality of subjective Bayesian methods. To this end, the paper describes publicly available software for Bayesian inference, model development, and communication and provides illustrations using two simple econometric models.

Ghatak, Maithreesh

PD April 1997. TI Moral Hazard and Overlapping Generations With Endogenous Occupational Choice. AU Ghatak, Maithreesh; Morelli, Massimo; Sjostrom, Tomas. AA Ghatak: University of Chicago. Morelli: Universite Catholique de Louvain and Iowa State University. Sjostrom: Harvard University. SR Universite Catholique de Louvain CORE Discussion Paper: 9728; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 30. PR $100 per year. JE D82, D91, J31. KW Agency Problem. Wages. Overlapping Generations. Coordination. Principal.
AB This paper introduces a general equilibrium, overlapping generations model of the principal-agent problem. Bargaining power, occupational choice, and the returns to each occupation are endogenous. Individuals live for two periods and must work when young. When old, they have a choice between becoming principals or remaining agents. Successful workers are paid high wages and may become self-financed principals when old; unsuccessful workers are paid low wages and can become principals only by borrowing money. In a "high wage" equilibrium, an imperfect credit market (which makes it costly to borrow money due to, for example, moral hazard between lender and borrower) mitigates the moral hazard problem on the labor market: young workers work harder than in the static model in order to succeed and become self-financed principals (the "American Dream" effect). The extra effort makes it possible for principals to pay high wages. However, there is a coordination problem.

Ghosh, Atish R.

PD January 1998. TI Currency Boards: The Ultimate Fix? AU Ghosh, Atish R.; Gulde, Anne-Marie; Wolf, Holger C. AA Ghosh and Gulde: International Monetary Fund. Holger: New York University, Princeton University and National Bureau of Economic Research. SR International Monetary Fund Working Paper: WP/98/08; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 22. PR not available. JE F33, F41, F43. KW Currency Boards. Fixed Exchange Rates. Inflation. Growth.
AB The growing integration of world capital markets has made it fashionable to argue that only extreme exchange rate regimes are sustainable. Short of adopting a common currency, currency board arrangements represent the most extreme form of exchange rate peg. This paper compares the macroeconomic performance of countries with currency boards to those with other forms of pegged exchange rate regime. Currency boards are indeed associated with better inflation performance, even allowing for potential endogeneity of the choice of regime. Perhaps more surprisingly, this better inflation performance is

accompanied by higher output growth.

Ghosh, Sugata

TI Fiscal Policies and the Terms of Trade in an Endogenous Growth Model with Overlapping Generations. AU Mourmouras, Iannis A.; Ghosh, Sugata.

Ghura, Dhaneshwar

PD December 1997. TI Private Investment and Endogenous Growth: Evidence From Cameroon. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/165; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 31. PR not available. JE C22, O11, O40, O55. KW Cameroon. Endogenous Growth.
AB This paper investigates empirically the factors that have influenced economic growth in Cameroon during 1963-96. The results, which support the endogenous-growth-type model, indicate that (1) the aggregate production function exhibits increasing returns to scale; (2) the impact of increases in private investment on growth is large, significant, and robust; (3) increases in government investment have a positive impact on growth; (4) human capital development plays an important role in output expansion; (5) positive externalities are generated by physical and human capital accumulation; and (6) growth is boosted by economic policies that foster external competitiveness and a prudent fiscal stance.

Giavazzi, Francesco

TI A Red Letter Day? AU Dornbusch, Rudiger; Favero, Carlo A.; Giavazzi, Francesco.

Gijbels, Irene

PD April 1997. TI On Estimation of Monotone and Concave Frontier Functions. AU Gijbels, Irene; Mammen, Enno; Park, Byeong U.; Simar, Leopold. AA Gijbels: Universite Catholique de Louvain. Mammen: Universitat Heidelberg. Park: Seoul National University. Simar: Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9731; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 19. PR $100 per year. JE C51, C52, C60, D20. KW Asymptotic Distribution. Bias Correction. Confidence Interval. Data Envelopment Analysis. Density Support.
AB A way for measuring the efficiency of enterprises is via the estimation of the so-called production frontier. It is reasonable to assume that the production frontier is a concave monotone function. A famous estimator is the data envelopment analysis (DEA) estimator, which is the lowest concave monotone increasing function covering all sample points. This estimator is biased downwards since it never exceeds the true production frontier. This paper derives the asymptotic distribution of the DEA estimator, which enables the authors to assess the asymptotic bias and hence to propose an improved bias corrected estimator. This bias corrected estimator involves consistent estimation of the density function as well as of the second derivative of the production frontier. The authors discuss the construction of asymptotic confidence intervals. The finite sample performance of the bias corrected estimator is investigated via a simulation study and the procedure is illustrated for a real data example.

Ginsburgh, Victor

PD April 1997. TI On the Declining Price Anomaly in Wine Auctions. AA Universite Libre de Bruxelles and Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9734; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 12. PR $100 per year. JE D44. KW Auctions. Wine. Absentee Bidding. Declining Prices.

AB The anomaly is concerned with the observation that in multiple-item auctions of identical objects, prices tend to decline over time. We show that in the case of wine auctions which have been analyzed frequently, the anomaly is likely to be caused by the fact that most bids are entered by absentees. If only absentees are interested in a multiple-lot auction and have sent different written valuations for the various lots, it is obvious that the auctioneer will sell the lots to satisfy bids in decreasing order of valuation.

Giot, Pierre

TI A Gibbs Sampling Approach to Cointegration. AU Bauwens, Luc; Giot, Pierre.

Glazebrook, Kevin D.

PD February 1997. TI Scheduling Multiclass Queueing Networks on Parallel Servers: Approximate and Heavy-Traffic Optimality of Klimov's Rule. AU Glazebrook, Kevin D.; Nino-Mora, Jose. AA Glazebrook: Newcastle University, UK. Nino-Mora: Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9710; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 28. PR $100 per year. JE C40, C60. KW Multiclass Queueing. Performance Guarantees. Heavy Traffic. Priority Index. Work Decomposition.

AB The authors address the problem of scheduling a multiclass queueing network on M parallel servers to minimize the time-average holding cost. They analyze a heuristic index rule, based on Klimov's solution to the single-server model: when a server becomes free it selects a customer with largest Klimov's index. The authors present closed-form performance guarantees for this heuristic, with respect to (1) the optimal cost in the original parallel-servers network, and (2) the optimal cost in a "corresponding" single-server network, attended by a server working M times faster. Simpler expressions are derived for the special case that there is no customer feedback, where the heuristic becomes the cu-rule. The authors' analysis is based on comparing the cost of the heuristic to the value of a strong linear programming relaxation, which equals the optimal cost for the "corresponding" single-server network. This relaxation follows from a set of approximate conservation laws the network satisfies.

Golder, Stefan M.

TI Migration to Switzerland: Some New Evidence. AU Straubhaar, Thomas; Golder, Stefan M.

Goldfajn, Ilan

PD December 1997. TI Are Currency Crises Predictable? AU Goldfajn, Ilan; Valdes, Rodrigo O. AA Goldfajn:

International Monetary Fund. Valdes: Central Bank of Chile. SR International Monetary Fund Working Paper: WP/97/159; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 19. PR not available. JE F31, F33. KW Currency Crises. Exchange Rate. Overvaluation. Expectations.

AB This paper studies whether exchange rate expectations and overvaluations are predictors of currency crises. The results suggest that overvaluation has predictive power in explaining crises. However, although expected depreciation obtained from survey data partially takes different measures of exchange rate misalignment into consideration, expectations fail to anticipate currency crises.

PD February 1998. TI Public Debt Indexation and Denomination: The Case of Brazil. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/18; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 28. PR not available. JE E58, H63. KW Public Debt. Indexation. Brazil.

AB The paper models the optimal debt management strategy of the public sector when issuing nominal, price-level-indexed and foreign-denominated debt securities. The model predicts that the variance of inflation, the size of the public debt, the variance of the real exchange rate, and the correlation of inflation with public expenditures are the main determinants of public debt management. Using this framework, the paper analyzes the Brazilian experience with indexed debt in the last decade. In particular, it explains the large increase of indexed public debt in Brazil prior to the 1994 Real plan and, thereafter, the steady decline in its use.

Gollac, Michel

TI New Technologies, Wages and Worker Selection. AU Kramarz, Francis; Entorf, Horst; Gollac, Michel.

Gomez, Victor

PD March 1998. TI Guide for Using the Programs TRAMO and SEATS. AU Gomez, Victor; Maravall, Agustin. AA Gomez: Ministerio de Economia y Hacienda. Maravall: Banco de Espana. SR Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9805; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid, Spain. Website: www.bde.es. PG 36. PR Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. JE C87. KW Time Series. Forecasting. Seasonal Adjustment. TRAMO. SEATS.

AB The present document details, step by step, an efficient and simple way to construct the input file for the programs TRAMO ("Time Series Regression with ARIMA Noise, Missing Observations, and Outliers") and SEATS ("Signal Extraction in ARIMA Times Series") for all possible cases and applications. First, the authors describe a fully automatic procedure where all parameters are set by the program. Then, for a more general use, the case of joint or separate application of the programs is described, as well as the case of a simple series or a large number of them. Special attention is paid to the construction of regression variables. Finally, the appendix contains some recommendations for increasing robustness of the results when the automatic procedure is followed.

PD March 1998. TI Automatic Modeling Methods for Univariate Series. AU Gomez, Victor; Maravall, Agustin.

AA   Gomez: Ministerio de Economia y Hacienda. Maravall: Banco de Espana. SR   Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9808; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid, Spain. Website: www.bde.es. PG   41. PR   Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. JE   C22. KW   Time Series. ARIMA Models. Missing Observations. Forecasting. Automatic Modeling.

AB   In this article, a unified approach to automatic modeling for univariate series is presented. First, ARIMA models and the classical methods for fitting these models to a given time series are reviewed. Second, some objective methods for model identification are considered and some algorithmic procedures for automatic model identification are described. Third, outliers are incorporated into the model and an algorithm for automatic model identification in the presence of outliers is proposed. Finally, the previous algorithm is extended to cope with missing observations, trading day and Easter effects, intervention and regression effects, and transfer functions.

PD   March 1998. TI   Seasonal Adjustment and Signal Extraction in Economic Time Series. AU   Gomez, Victor; Maravall, Agustin. AA   Gomez: Ministerio de Economia y Hacienda. Maravall: Banco de Espana. SR   Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9809; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid, Spain. Website: www.bde.es. PG   46. PR   Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. JE   C22, C51, E32. KW   Time Series. ARIMA Models. Seasonal Adjustment. Signal Extraction. Trend Estimation.

AB   The paper deals with seasonal adjustment and trend estimation as a signal extraction problem in a regression-ARIMA model-based framework. This framework includes the capacity to preadjust the series by removing outliers and deterministic effects in general. For the preadjusted series the model considered is that of an ARIMA model for the aggregate series, with ARIMA-type models for the components. We address the issues of model (and signal) specification, optimal estimation of the signal and distribution of the estimators, preliminary estimation and revision, optimal forecasting, estimation and forecasting errors, and show how the mode-based structure can be exploited to give precise answers to a problem of applied relevance. Further, it is seen how the model-based analysis can be extended to incorporate ad-hoc filtering, and an application is made to the problem of measuring the business cycle. The discussion is illustrated with an example (the Spanish Industrial Production Index).

Gonzalez-Hermosillo, Brenda

PD   December 1997. TI   The Bank of Canada's Monetary Policy Framework: Have Recent Changes Enhanced Central Bank Credibility? AU   Gonzalez-Hermosillo, Brenda; Ito, Takatoshi. AA   International Monetary Fund. SR   International Monetary Fund Working Paper: WP/97/171; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG   20. PR   not available. JE   E52, E58. KW   Monetary Policy. Inflation Targeting.

AB   In recent years the Bank of Canada has made important changes in the way it conducts monetary policy. In particular, the bank has adopted explicit inflation targets and introduced significant changes to its operational framework designed to increase transparency and reduce market uncertainty. This paper examines the key issues associated with the recent changes in the Bank of Canada's monetary policy framework and analyzes various indicators of central bank credibility.

Gonzalez-Minguez, Jose M.

PD   November 1998. TI   El Papel del Euro en el Sistema Monetario Internacional. AU   Gonzalez-Minguez, Jose M.; Santillan-Fraile, Javier. AA   Gonzalez-Minguez: Banco de Espana. Santillan-Fraile: European Central Bank. SR   Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9818; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid, Spain. Website: www.bde.es. PG   36. PR   Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. JE   F31, F33, F42. KW   Euro. Monetary Systems. IMS.

AB   This paper analyzes the consequences of the creation of the euro on the International Monetary System (IMS). Presumably, the creation of the new currency will not alter the basic characteristics of the IMS (such as the floating system between the main currencies or the lack of explicit mechanisms for the international coordination of economic policies), although it will potentially affect the relative utilization of the different currencies, amongst which the euro will tend to play a relevant role in the long run. The new currency will presumably be a sound currency, supported by economic policies capable of permanently guaranteeing nominal stability.

Gonzalez-Paramo, Jose M.

TI   A Cost-Benefit Analysis of Going From Low Inflation to Price Stability in Spain. AU   Dolado, Juan J.; Gonzalez-Paramo, Jose M.; Vinals, Jose.

Gordo, Esther

TI   Funciones Trimestrales de Exportacion e Importacion Para La Economia Espanola. AU   Garcia, Coral; Gordo, Esther.

Grafe, Clemens

TI   The Real Exchange Rate in Transition Economies. AU   Wyplosz, Charles; Grafe, Clemens.

Granger, Clive W. J.

PD   April 1997. TI   Evaluation of Panel Data Models: Some Suggestions from Time Series. AU   Granger, Clive W. J.; Huang, Ling-Ling. AA   University of California, San Diego. SR   University of California, San Diego, Department of Economics Working Paper: 97/10; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG   24. PR $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. JE   C40, C50. KW   Panel Models. Evaluation. Post-Sample.

AB   The problems of how to evaluate and compare the quality of models formed from panel data are discussed. Using the lessons learnt from the valuation of time series models using post-sample forecasting a variety of tests are suggested using several out-of-sample parts of a panel data set, but un-used regions and time periods. Emphasis is on comparing models and two real-data examples are provided -- a transition model of land use in the Amazon region and a production model using

Jorgenson's input-output database. Specific consideration is given to data quality and the effect of outliers and to policy model evaluation.

PD October 1997. **TI** Measuring Lag Structure in Forecasting Models -- the Introduction of Time Distance. **AU** Granger, Clive W. J.; Jeon, Yongil. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 97/24; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 20. **PR** $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. **JE** C22, C53. **KW** Forecast Criteria. Leading Indicators.
AB In modeling series with leading or lagging indicators, it is desirable to begin comparing models in terms of time distance. This paper formalizes the concept of time distance in terms of various metrics, and investigates the behaviors of these metrics. It is shown that under some circumstances, time distance metrics indeed perform better in forecasting than standard measures (such as MSPE), and that some time-distance metrics outperform others.

PD November 1997. **TI** The Correlogram of a Long Memory Process Plus a Simple Noise. **AU** Granger, Clive W. J.; Marmol, Francesc. **AA** Granger: University of California, San Diego. Marmol: Universidad Carlos III de Madrid. **SR** University of California, San Diego, Department of Economics Working Paper: 97/29; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 16. **PR** $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. **JE** C22. **KW** Correlogram. Long Memory. Financial Data.
AB A frequent property of data, particularly in the financial area, is that the correlogram is low but remains positive for many lags. A plausible explanation for this is that the process consists of a stationary, long memory component plus a white noise component of much larger variance. The implications of such a composition are explored including the consequences for estimation of the long memory parameter.

Grant, Simon
PD May 1998. **TI** On the Skiadal "Conditional Preference Approach" to Choice Under Uncertainty. **AU** Grant, Simon; Kajii, Atsushi; Polak, Ben. **AA** Grant: Australian National University. Kajii: University of Tsukuba. Polak: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1178; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 13. **PR** no charge up to 3 papers; $3.00 domestic; 4.00 International. **JE** D81. **KW** Conditional Preference. Uncertainty. Decomposability. Disappointment.
AB We compare the Skiadas approach with the standard Savage framework of choice under uncertainty. At first glance, properties of Skiadas "conditional preferences" such as coherence and disappointment seem analogous to similarly motivated notions of decomposability and disappointment aversion defined on Savage "ex ante preferences. Coherence is an 'external' restriction across preferences whereas notions of decomposability in the Savage framework are 'internal' to the

particular preference relation. Similarly, standard notions of disappointment aversion refer to 'within act' disappointments. Skiadas's notion of disappointment aversion for families of conditional preference relations neither implies nor is implied by standard notions of disappointment aversion for ex ante preferences.

Gray, Dale F.
PD March 1998. **TI** Evaluation of Taxes and Revenues from the Energy Sector in the Baltics, Russia, and Other Former Soviet Union Countries. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/98/34; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 78. **PR** not available. **JE** H20, L10, L50, L71, L95, P20. **KW** Tax Policy. Petroleum. Natural Resources. Regulation. Energy. Natural Monopoly.
AB This paper examines the level and structure of fiscal revenues from the Baltics, Russia, and other former Soviet Union countries' (BRO) energy sector and suggests reforms in energy tax policy. Revenues from the oil and gas sectors are about half the level that might be expected from international comparisons. Low oil revenues result from infrastructure constraints on oil exports, weak tax administration, and inappropriate tax structures. Low gas revenues are due to low statutory tax rates, a tax structure that does not capture monopoly or resource rents, and weak tax administration. Taxation of oil products could be increased.

Gray, Wayne B.
PD May 1997. **TI** Environmental Regulation, Investment Timing, and Technology Choice. **AU** Gray, Wayne B.; Shadbegian, Ronald J. **AA** Gray: Clark University and National Bureau of Economic Research. Shadbegian: University of Massachusetts. **SR** National Bureau of Economic Research Working Paper: 6036; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 37. **PR** $5.00. **JE** G31, L51, L73, O33, Q28. **KW** Productivity. Paper Industry. Investment. Technology Choice. Environmental Regulation.
AB The authors began this project interested in collecting "real-world" insights about how environmental regulation affects the paper industry. Based on conversations with people in the industry and visits to paper mills, they formulated several hypotheses related to technology choice in new mills and the investment decision for existing plants. They tested these hypotheses, using technology choice data for 686 paper mills and annual investment data for 116 mills. Technology choice is influenced by environmental regulation. New mills in states with strict environmental regulations are less likely to employ the more polluting technologies involving pulping. Differences between air and water pollution regulations also emerge, with the dirtiest technology in each medium avoiding those states with the strictest regulations. The magnitudes of the impacts are sizable, with a one standard deviation increase in stringency associated with several percentage point reductions in the probability of choosing a dirty technology.

Green, Richard
PD March 1998. **TI** Competition in Electricity Supply: Will '1998' be Worth it? **AU** Green, Richard; McDaniel, Tanga. **AA** Cambridge University. **SR** Centre for Economic Policy Research Discussion Paper: 1814; 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** L50, L94. **KW** Electricity. Regulation. Restructuring. Competition.

AB Starting in 1998, the electricity market in England and Wales will be opened up to full competition, and all consumers will be allowed to choose their electricity supplier. This promises to result in lower prices, but there will be additional transactions costs exceeding 100 million pounds a year for the first five years. Relative to a counterfactual without competition, there are likely to be large transfers from electricity companies (and the coal industry) to consumers, but the companies lose more than consumers gain. This conclusion might be reversed, if competitive pressure leads to significant additional cost savings in the future.

Griffiths, Mark

TI The Nonmonetary Determinants of Inflation: A Panel Data Study. **AU** Cottarelli, Carlo; Griffiths, Mark; Moghadam, Reza.

Grilo, Isabel

PD April 1997. **TI** Price Competition When Consumer Behavior is Characterized By Conformity or Vanity. **AU** Grilo, Isabel; Shy, Oz; Thisse, Jacques-Francois. **AA** Grilo: Universite de Lille III and Universite Catholique de Louvain. Shy: Stockholm School of Economics. Thisse: Universite Catholique de Louvain and CERAS, Ecole Nationale des Ponts et Chaussees. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9732; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 19. **PR** $100 per year. **JE** D11, D62, L13. **KW** Price Competition. Networks. Consumption Externality. Welfare. Conformity.

AB It has long been recognized that the pleasure of consuming a good may be affected by the consumption choice of other consumers. In some cases social pressures may lead to conformity; while in some other cases individuals may feel the need of exclusiveness under the form of vanity. Such externalities have proven to be important in several markets. However, the market and welfare implication of these effects are still unclear. To investigate them, the authors propose to graft the consumption externality model onto the spatial duopoly model. When conformity is present but not too strong, both firms remain in business but price competition is fiercer and results in lower prices. When conformity is strong enough, different equilibria may exist. These equilibria are such that only one firm has a positive market share or both firms split the market. When vanity is at work, price competition is relaxed.

PD July 1997. **TI** Competing With Second-Hand Products When Consumers Differ in Risk Aversion. **AU** Grilo, Isabel; Wauthy, Xavier. **AA** Grilo: Universite Catholique de Louvain and Lille III, Gremars. Wauthy: Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9750; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 23. **PR** $100 per year. **JE** D43, L13. **KW** Product Differentiation. Risk Aversion. Reliability.

AB When consumers differ in their attitude towards risk, price competition between products of uncertain characteristics may be analyzed using address-models of product differentiation. These models provide a natural set-up for analyzing industries in which products of different reliability may coexist. This is in particular the case of second-hand markets. For such industries, the authors characterize the Nash equilibrium in prices and the associated market outcomes. They are shown to depend mainly on the distribution of risk aversion in the population. When the degree of reliability is chosen before price competition takes place, maximal differentiation results, yielding either horizontal or vertical differentiation configurations.

Grossbard-Shechtman, Shoshana

PD February 1998. **TI** The Extra Burden of Moslem Wives: Clues From Israeli Women's Labour Supply. **AU** Grossbard-Shechtman, Shoshana; Neuman, Shoshana. **AA** Grossbard-Shechtman: San Diego State University. Neuman: Bar-Ilan University. **SR** Centre for Economic Policy Research Discussion Paper: 1807; 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** J12, J15, J21, J22. **KW** Labor Force Participation. Israel. Marriage. Religion. Labor Supply.

AB This paper examines differences in the labor supply of women of different religions in Israel. We estimate religious differentials in the effect of husband's income, number of children, education, and age on married women's labor supply. It is suggested that labor supply patterns of wives from different religious backgrounds may reveal differences in the institutions which different religious groups have established to regulate marriage and divorce. Our results suggest that Christian marital institutions are closer to Jewish marital institutions than they are to Moslem marital institutions. Moslem women appear to be less likely to translate their resources into a higher value of time in marriage than either Christian women or Jewish women. Educated Moslem women seem to have fewer constraints on their marriages than their uneducated counterparts.

Grossman, Gene M.

PD January 1998. **TI** Free Trade Versus Strategic Trade: A Peek into Pandora's Box. **AU** Grossman, Gene M.; Maggi, Giovanni. **AA** Princeton University. **SR** Centre for Economic Policy Research Discussion Paper: 1784; 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** F13. **KW** Strategic Trade Policy. Export Subsidies. Policy Commitment. Rules. Discretion.

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

informed about firms' types and actions, and when it suffers from an informational disadvantage.

Gruber, Jonathan

PD May 1997. TI Abortion Legalization and Child Living Circumstances: Who is the "Marginal Child?" AU Gruber, Jonathan; Levine, Phillip; Staiger, Douglas. AA Gruber: Massachusetts Institute of Technology and National Bureau of Economic Research. Levine: Wellesley College and National Bureau of Economic Research. Staiger: Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6034; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 32. PR $5.00. JE H53, I18, I31, J13, K32. KW Children. Health Care. Public Economics. Abortion. Living Standards.

AB The authors estimate the impact of changes in abortion access in the early 1970's on the average living standards of cohorts born in those years. In particular, the authors address the selection inherent in the abortion decision: is the marginal child who is not born when abortion access increases more or less disadvantaged than the average child? The authors find that cohorts born after abortion was legalized experienced a significant reduction in a number of adverse outcomes. Their estimates imply that the marginal child who was not born due to legalization would have been 70% more likely to live in a single parent family, 40% more likely to live in poverty, 50% more likely to receive welfare, and 35% more likely to die as an infant. These selection effects imply that the legalization of abortion saved the government over $14 billion in welfare expenditures through 1994.

TI Insuring Consumption Against Illness. AU Gertler, Paul; Gruber, Jonathan.

PD May 1997. TI Public Health Insurance and Private Savings. AU Gruber, Jonathan; Yelowitz, Aaron. AA Gruber: Massachusetts Institute of Technology and National Bureau of Economic Research. Yelowitz: University of California, Los Angeles and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6041; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE E21, H51, I18. KW Children. Savings. Health Care. Social Insurance. Medicaid.

AB Recent theoretical work suggests that means and asset-tested social insurance programs can explain the low savings of lower income households in the U.S. The authors assess the validity of this hypothesis by investigating the effect of Medicaid on savings behavior. They do so using data on asset holdings from the Survey of Income and Program Participation, and on consumption from the Consumer Expenditure Survey, matched to information on the eligibility of each household for Medicaid. The authors document that Medicaid eligibility has a sizable and significant negative effect on wealth holdings. They confirm this finding by showing a strong positive association between Medicaid eligibility and consumption expenditures; in 1993, the program raised consumption expenditures among eligibles by 5.2%. They also exploit the fact that asset testing was phased out by the Medicaid program over this period to document that these Medicaid effects are stronger in the presence of asset testing.

Gulde, Anne-Marie

TI Currency Boards: The Ultimate Fix? AU Ghosh, Atish R.; Gulde, Anne-Marie; Wolf, Holger C.

Gupta, Sanjeev

PD November 1997. TI The Efficiency of Government Expenditure: Experiences From Africa. AU Gupta, Sanjeev; Honjo, Keiko; Verhoeven, Marijn. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/153; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 60. PR not available. JE H51, H52, I18, I28. KW Africa. Government Expenditure. Education. Health. Social Indicators.

AB This paper assesses the efficiency of government expenditure on education and health in 38 countries in Africa in 1984-95, both in relation to each other and compared with countries in Asia and the Western Hemisphere. The results show that, on average, countries in Africa are less efficient than countries in Asia and the Western Hemisphere; however, education and health spending in Africa became more efficient during that period. The assessment further suggests that improvements in educational attainment and health output in African countries require more than just higher budgetary allocation.

Gurgen, Emine

TI Payments Arrears in the Gas and Electric Power Sectors of the Russian Federation and Ukraine. AU Bagratian, Hrant; Gurgen, Emine.

Ha, Jiming

TI Achieving Stabilization in Armenia. AU Horvath, Balazs; Thacker, Nita; Ha, Jiming.

Habermeier, Karl F.

PD February 1998. TI French Public Finances: Modeling Long-Term Prospects and Reform Options. AU Habermeier, Karl F.; Lenseigne, Fabrice. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/12; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 49. PR not available. JE H01, O04, J02. KW Population Aging. Economic Growth. Public Finance. Pensions. Health Care.

AB Over the coming decades, demographic developments will lead to a significant increase in public outlays on pensions and health care, relative to national income. This study extends earlier work by considering the adverse effects of taxation on the determinants of economic growth -- in particular, investment, productivity growth, and labor force participation. Available empirical evidence suggests that these adverse effects could well be sizable, and that conventional estimates of the adverse effects of population aging probably severely underestimate their impact on the public finances and economic performance. The paper uses stochastic simulations to examine the robustness of the results to changes in parameter values. It also provides quantitative simulations of various reform options, including mainly an increase in the effective retirement age and flanking labor market measures.

Hadjimichael, Michael T.

PD November 1997. TI The CFA Franc Zone and the EMU. AU Hadjimichael, Michael T.; Galy, Michel. AA International Monetary Fund. SR International

Monetary Fund Working Paper: WP/97/156; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 38. **PR** not available. **JE** F15, F31, F33, F35, F36. **KW** Monetary Union. Currency Areas. CFA Franc. EMU.
AB Whether the prospective shift of the peg of the CFA franc to the euro would constitute an exchange rate arrangement with EMU countries would depend critically on the interpretation of the free convertibility of the CFA franc guaranteed by France. Nonetheless, this shift is likely to leave the CFA franc arrangements and operating features of the zone essentially unchanged. The current parity of the CFA franc could be considered in line with fundamentals. The potential economic consequences for the CFA franc countries could be positive over the long term, but there is a risk of a weakening of external competitiveness.

Hafner, Christian
TI Discrete Time Option Pricing With Flexible Volatility Estimation. **AU** Hardle, Wolfgang; Hafner, Christian.

Halonen, Maija
PD October 1997. **TI** Incomplete Contracts, Vertical Integration and Product Market Competition. **AU** Halonen, Maija; Williams, Iestyn. **AA** Halonen: University of Bristol. Williams: University of Southampton. **SR** University of Southampton Discussion Papers in Economics and Econometrics: 9716; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton SO17 1BJ, England. Website: www.soton.as.uk/discp.html. **PG** 27. **PR** on application. **JE** D23, L12, L13, L14, L22. **KW** Incomplete Contracts. Vertical Integration. Foreclosure. Competition.
AB This paper adopts an incomplete contracts approach to vertical integration, relating the choice of ownership structure explicitly to the investment incentives of self-interested agents. In particular, the authors focus on the dependence of equilibrium industry ownership structure on two key influences: the relative effectiveness of upstream (versus downstream) investment and the toughness of final product market competition. Concentrating asset ownership in downstream hands encourages specialization in final good production, at the expense of valuable investment in input production. The attractions of foreclosure- inducing integration are found to decrease with the relative effectiveness of upstream investment, but vary non-monotonically with increases in the toughness of competition.

Hamilton, Dan E.
PD August 1997. **TI** How Productive are Public Capital, Private Capital, Human Capital and R&D in the U.S.? **AA** University of California and Santa Barbara. **SR** University of California, Santa Barbara, Working Papers in Economics: 12/97; Working Papers in Economics, Department of Economics, University of California, Santa Barbara 93106. Website: www.econ.ucsb.edu. **PG** 35. **PR** no charge. **JE** C22, E23, O47. **KW** Cointegration. Public Capital. Human Capital. R&D.
AB Time series studies have found that the impact of public capital on postwar U.S. private sector output and productivity is surprisingly large. These studies neglect the economic effects of human capital on R&D, which I add to the aggregate production function. Omission of human capital and R&D leads to omitted variables bias in the public capital output elasticity.

With the expanded model the estimated output elasticity for public capital is roughly half of previous estimates like that of Aschauer (1989). Public capital explains only 27 percent of the post-1973 productivity slowdown.

Hamilton, James D.
PD October 1997. **TI** The Supply and Demand for Federal Reserve Deposits. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 97/27; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 39. **PR** $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. **JE** E40, E52. **KW** Monetary Policy. Money Demand. Liquidity Effect. Federal Reserve.
AB This paper argues that the following ingredients are necessary in order to draw causal inference from historical correlation's: explication of the real-world mechanism that is supposed to have produced a proposed structural relation; the existence of a natural experiment through which the data were generated; and extensive statistical corroboration of the econometric model. This research strategy is employed in an effort to identify the sources of disturbances to the supply and demand for Federal Reserve deposits. The effect of a shock in the supply of reserves on the federal funds rate depends on the marginal benefits banks perceive to holding excess reserves and the marginal costs of discount window borrowing. We find empirically that a temporary shock to the supply of reserves will only induce banks to borrow at the discount window if it occurs on settlement Wednesday or the last day of the quarter. The structural estimates presented here suggest that a $1 billion loss in reserves will raise the federal funds rate by 6.6 basis points if it occurs on settlement Wednesday or the last day of a quarter and by 2.6 basis points if it occurs on other days. A number of alternative sources of evidence are used to corroborate these structural estimates and to provide independent statistically significant confirmation that a reduction in the supply of reserves clearly raises the overnight interest rate.

PD November 1997. **TI** The Augmented Solow Model and the Productivity Slowdown. **AU** Hamilton, James D.; Monteagudo, Josefina. **AA** Hamilton: University of California, San Diego. Monteagudo: Universidad Autonoma de Barcelona. **SR** University of California, San Diego, Department of Economics Working Paper: 97/28; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 17. **PR** $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. **JE** O41. **KW** Growth Theory. Solow Growth Model. Human Capital.
AB In an insightful and influential paper, Mankiw, Romer and Weil (1992) have suggested that an augmented Solow growth model can account for 80% of the variation in output per capita across countries due to different steady-state growth paths that result from differences in saving rates, education, and population growth. This paper carries their analysis one step further and asks whether changes in the growth rate between the 1960's and the 1980's can also be explained by this framework. Our results provide further support for several of

Mankiw, Romer and Weil's key conclusions -- investment in physical capital, population growth, and the initial levels of output seem to matter a great deal. However, investment in human capital has no ability to account for changes in growth rates over time. We conclude that investment in physical capital seems to be quite important for economic growth, though the reasons for this importance may not be fully captured by the augmented Solow growth model.

Hamilton, Jonathan

PD March 1997. TI Skill Acquisition and Wage Competition With Heterogeneous Workers and Firms. AU Hamilton, Jonathan; Thisse, Jacques-Francois; Zenou, Yves. AA Hamilton: University of Florida, Gainesville. Thisse: Universite Catholique de Louvain and Ecole Nationale des Ponts et Chaussees, Paris. Zenou: Universite de Paris-II, and Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9722; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 16. PR $100 per year. JE I22, J41. KW Education Financing. Median Voter. Information Structure. Labor Markets. Wage Setting.
AB The authors study labor market competition with heterogeneous firms and consumers. Worker types are continuously distributed within the population and a finite number of firms have specific skill requirements. Specific human capital investment is the cost of training a worker to be able to work for a particular firm and depends on the difference between the worker's skill type and the firm's skill requirement. A firm's profit equals its output minus wages, its share of training costs, and a fixed cost. The authors solve for symmetric free- entry Nash equilibria of the wage offer game under two different information structures. When firms can identify worker types before employment, firms can pay different net wages to workers with different training costs. When firms cannot identify worker training costs in advance, firms pay workers equal wages, but workers absorb training costs.

Haoming, Liu

PD November 1997. TI Labor Quality and the Cyclicality of Real Wages. AA University of Western Ontario. SR University of Western Ontario Department of Economics Research Reports: 9712; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.ssc1.uwo.ca/economics. PG 43. PR $10.00 Canadian per paper. JE E24. KW Labor Quality. Cyclicality. Real Wages.
AB Because labor quality changes over the business cycle, the cyclicality of aggregate wages cannot reflect the true cyclical behavior of the price of labor inputs. To control for changes in labor quality, many researchers have examined the cyclical behavior of the price of labor inputs using microdata sets with mixed results. In this paper, I develop a hedonic pricing methods to examine the cyclicality of real wages and implement it using the U.S. Current population Survey (CPS) data. The flexibility of the hedonic method and the large sample size of the CPS data make it possible to replicate and reconcile the results from a number of major studies on a single data set. I find that the lower the frequency of the data, the greater is the procyclicality of real wages. This pattern has not been

documented and cannot be explained by current business cycle theories.

Hardle, Wolfgang

PD June 1997. TI Discrete Time Option Pricing With Flexible Volatility Estimation. AU Hardle, Wolfgang; Hafner, Christian. AA Hardle: Institut fur Statistik and Okonometrie, Humboldt-Universitat zu Berlin. Hafner: Universite Catholique de Louvain, and SFB 373, Humboldt-Universitat zu Berlin. SR Universite Catholique de Louvain CORE Discussion Paper: 9747; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 28. PR $100 per year. JE G13. KW GARCH. Option Pricing. Flexible Volatility.
AB By extending the GARCH option pricing model of Duan (1995) to more flexible volatility estimation it is shown that the prices of out-of- money options strongly depend on volatility features such as asymmetry. Results are provided for the properties of the stationary pricing distribution in the case of a threshold GARCH model. For a stock index series with a pronounced leverage effect, simulated threshold GARCH option prices are substantially closer to observed market prices than the Black/Scholes and simulated GARCH prices.

Hardy, Daniel C.

PD April 1998. TI Anticipation and Surprises in Central Bank Interest Rate Policy: The Case of the Bundesbank. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/43; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 28. PR not available. JE E43, E47. KW Central Banking. Monetary Policy. Germany.
AB Market reaction to a change in official interest rates will depend on the extent to which the change is anticipated, and on how it is interpreted as a signal of future policy. In this paper, a technique is developed to separate the anticipated and unanticipated components of such changes and is applied to estimate the response of Euro-deutsch mark interest rates to adjustments in the Bundesbank's Lombard and discount rates. The results shed light on the efficiency of this market and on the scope for policy signaling by the central bank.

Hassett, Kevin A.

TI Inflation and the User Cost of Capital: Does Inflation Still Matter? AU Cohen, Darrel; Hassett, Kevin A.; Hubbard, R. Glenn.

Hassink, Wolter H. J.

TI Monitoring the Monitors: Amakudari and the Ex-Post Monitoring of Private Banks. AU van Rixtel, Adrian A. R. J. M.; Hassink, Wolter H. J.

Hassler, John

TI Intergenerational Risk Sharing, Stability and Optimality of Alternative Pension Systems. AU Lindbeck, Assar; Hassler, John.

PD February 1998. TI IQ, Social Mobility and Growth. AU Hassler, John; Mora, Jose V. Rodriguez. AA Hassler: Stockholm University. Mora: Universitat Pompeu Fabra. SR Centre for Economic Policy Research Discussion Paper: 1827; 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 J24, J62, O15, O40. KW Social Mobility. Intelligence. Growth. Entrepreneurship.

AB Intelligent agents may contribute to higher technological growth if assigned appropriate positions in the economy. These positive effects on growth are unlikely to be internalized on a competitive labor market. The allocation of talent depends on the relative award the market assigns to intelligence versus other individual merits, which will also influence intergenerational social mobility. To illustrate this, the authors present an endogenous growth model where each agent can choose to be a worker or an entrepreneur. The reward to entrepreneurs is an endogenous function of the abilities endowed them by nature as well as of the amount of knowledge and other social assets they inherit from their parents. When growth is low, the equilibrium in the labor market implies that the reward to entrepreneurs depends more on social assets than on intelligence. This gives children of entrepreneurs a large ex-ante advantage over children of workers when working as entrepreneurs.

Hautcoeur, Pierre-Cyrille
TI Threat of a Capital Levy, Expected Devaluation and Interest Rates in Inter-War France. AU Sicsic, Pierre; Hautcoeur, Pierre-Cyrille.

Havrylyshyn, Oleh
PD February 1998. TI Opening Up and Geographic Diversification of Trade in Transition Economics. AU Havrylyshyn, Oleh; Al-Atrash, Hassan. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/22; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 27. PR not available. JE F15, F17, O57. KW Trade Diversification. Trade Openness. Transition Economics.

AB This paper looks at the progress in transition and the geographic diversification of trade, focusing on two issues -- the degree of trade openness and trade integration -- for a sample of countries in transition. It concludes that about half of the group of countries sampled are becoming as open as similar market economies, but that many others remain relatively closed. Geographic diversification (to the European Union) is found to be greater the closer is geographic proximity and the more advanced the country is with reforms. The analysis is then extended, in an illustrative way, to show how much larger would be the share of exports to the EU if structural reforms were more ambitious.

Heath, Robert M.
PD March 1998. TI The Statistical Measurement of Financial Derivatives. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/24; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 67. PR not available. JE B41, C82, E44, F01, G10. KW Statistical Measurement. Financial Derivatives.

AB The System of National Accounts 1993 (1993 SNA) provided new standards for the statistical treatment of financial derivatives. Subsequently, financial derivative markets have evolved, and there have been requests from national statisticians for clarification and amplification of the recommendations in the 1993 SNA and the fifth edition of the IMF's Balance of Payments Manual (BPM5). Meeting this need is the main purpose of this working paper. Its recommendations have been widely discussed in international meetings and have been approved by bodies that effect changes in the 1993 SNA and BPM5.

Helliwell, John F.
PD May 1997. TI National Borders, Trade and Migration. AA University of British Columbia and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6027; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 29. PR $5.00. JE F14, F22, F41, J61, R10. KW International Trade. Investment. Trade Patterns. National Borders. Migration.

AB The paper first extends and reconciles recent estimates of the large effect of national borders on trade patterns. Estimates comparing trade among Canadian provinces with that between Canadian provinces and U.S. states show interprovincial trade in 1988-90 to have been more than twenty times as dense as that between provinces and states, with evidence of a downward trend since. Using approximate data for the volumes and distances of internal trade in OECD countries, the 1988-92 border effect for unrelated OECD countries is estimated to exceed 12. Both types of data confirm substantial border effects, even after accounting for common borders and language, with the directly-measured data for interprovincial and province-state trade producing higher estimates. Initial estimates from a census-based gravity model of interprovincial and international migration show a much higher border effect for migration. Effects of migration on subsequent trade patterns are found for international but not for interprovincial trade.

Helper, Susan
PD May 1997. TI Complementarity and Cost Reduction: Evidence From the Auto Supply Industry. AA Case Western Reserve University. SR National Bureau of Economic Research Working Paper: 6033; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 37. PR $5.00. JE J24, J50, L23, L62, O47. KW Productivity. Automobile Industry. Cost Reduction. Complementarity. Employee Involvement.

AB Over the last 20 years, the success of Japanese manufacturing firms has brought renewed attention to the importance of cost reduction on existing products as a source of productivity growth. This paper uses survey data and field interviews from the auto supply industry to explore the determinants of average-cost reduction for a sample of 171 plants in the United States and Canada between 1988-1992. The main result is that the determinants of cost reduction differ markedly between firms which had employee involvement programs in 1988 and firms that did not. The two groups of firms achieved equal amounts of cost reduction, but did so in very different ways. Firms with employee involvement saw their costs fall more if they also had "voice" relationships with customers and workers. Firms without such involvement gained no cost-reduction benefit from these programs; instead, their cost-reduction success was largely a function of increases in volume.

Hemming, Richard
PD March 1998. TI Should Public Pensions be Funded?

AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/35; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 35. PR not available. JE H55, H60, J10. KW Public Pensions. Funding. Pay-As-You-Go. Aging Populations.
AB This paper outlines some of the arguments for and against the funding of public pensions, with a view to establishing whether there is an economic basis for judging funding to be superior to pay-as-you-go (PAYG). It is argued that funding does not have a clear advantage, and the case for a shift from PAYG to funding is thus an uneasy one. There is nonetheless growing advocacy of funded public pensions as part of an ideal pension system, which raises more general issues about the role of the public sector in pension provision.

Henderson, Rebecca

TI Public-Private Interaction and the Productivity of Pharmaceutical Research. AU Cockburn, Iain; Henderson, Rebecca.

Henderson, Vernon

TI Urban Growth. AU Black, Duncan; Henderson, Vernon.

Hendricks, Ken

PD October 1997. TI Equilibria in Networks. AU Hendricks, Ken; Piccione, Michele; Tan, Guofo. AA Hendricks and Tan: University of British Columbia. Piccione: University of Southampton. SR University of Southampton Discussion Papers in Economics and Econometrics: 9717; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.as.uk/discp.html. PG 55. PR on application. JE L11, L93. KW Airlines. Networks. Hub-Spoke.
AB The authors study a model in which two carriers choose networks to connect cities and compete for travelling customers. They show that if carriers compete aggressively (e.g., Bertrand-like behavior), one carrier operating a single hub-spoke network is an equilibrium outcome. Competing hub-spoke networks are not an equilibrium outcome, although duopoly equilibria in non-hub networks can exist. If carriers do not compete aggressively, a duopoly equilibrium in hub-spoke networks exists if the number of cities is not small. The authors provide conditions under which all equilibria consist of hub-spoke networks.

Herings, P. Jean-Jacques

PD January 1997. TI Refinements of Rationalizability for Normal-Form Games. AU Herings, P. Jean-Jacques; Vannetelbosch, Vincent J. AA Herings: Tilburg University. Vannetelbosch: Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9702; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 26. PR $100 per year. JE C72. KW Rationalizability. Refinements. Game Theory.
AB In normal-form games, rationalizability on its own fails to exclude some very implausible strategy choices. Three main refinements of rationalizability have been proposed in the literature: cautious, perfect, and proper rationalizability. Nevertheless, some of these refinements also fail to eliminate unreasonable outcomes and suffer from several drawbacks. Therefore, the authors introduce the trembling-hand rationalizability concept, where the players' actions have to be best responses also against perturbed conjectures. The authors also propose another refinement: weakly perfect rationalizability, where players' actions that are not best responses are only played with a very small probability. They show the relationship between perfect rationalizability and weakly perfect rationalizability as well as the relationship between proper rationalizability and weakly perfect rationalizability: weakly perfect rationalizability is a weaker refinement than both perfect and proper rationalizabililty. Moreover, in two-player games it holds that weakly perfect rationalizability is a weaker refinement than trembling-hand rationalizability.

PD March 1998. TI The Equivalence of the Dekel-Fudenberg Iterative Procedure and Weakly Perfect Rationalizability. AU Herings, P. Jean-Jacques; Vannetelbosch, Vincent J. AA Herings: CentER and Department of Econometrics, Tilburg University; Vannetelbosch: CORE, University of Louvain and IEP, Basque Country University. SR Yale Cowles Foundation Discussion Paper: 1173; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. PG 11. PR no charge up to 3 papers; $3.00 domestic; 4.00 International. JE C72. KW Rationalizability. Refinements.
AB Two approaches have been proposed in the literature to refine the rationalizability solution concept: either assuming that players make small errors when playing their strategies, or assuming that their is a small amount of payoff uncertainty. We show that both approaches lead to the same refinement if errors are made according to the concept of weakly perfect rationalizability, and there is payoff uncertainty as in Dekel and Fudenberg [J. of Econ. Theory 52 (1990), 243-267]. For both cases, the strategies that survive are obtained by starting with one round of elimination of weakly dominated strategies followed by many rounds of elimination of strictly dominated strategies.

Hernandez de Cos, Pablo

PD May 1998. TI El Credito Comercial en las Empresas Manufactureras Espanolas. AU Hernandez de Cos, Pablo; Hernando, Ignacio. AA Banco de Espana. SR Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9810; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid, Spain. Website: www.bde.es. PG 22. PR Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. JE D82, E52, G32, G39. KW Trade Credit. Manufacturing Firms. Business Cycles. Monetary Policy. Asymmetric Information.
AB The study of trade credit is justified both for the importance that this financing channel has for non-financial firms and for its potential role in the transmission mechanism of monetary policy. Using individual information from a sample of manufacturing firms which cooperate with the Central Balance Sheet Data Office of the Bank of Spain, this paper analyzes the role that trade credit may have in the amelioration of the problems of asymmetric information between firms and the credit institutions. The results obtained show that: 1) other things equal, firms with lower (higher) cost of external

financing are the ones which give (receive) trade credit; 2) average periods of payments are countercyclical; and 3) these average periods seem to be independent of the stance of monetary policy.

Hernando, Ignacio
TI   Disinflation, Output and Unemployment: The Case of Spain. AU   Andres, Javier; Hernando, Ignacio; Lopez-Salido, J. David.

TI   El Credito Comercial en las Empresas Manufactureras Espanolas. AU   Hernandez de Cos, Pablo; Hernando, Ignacio.

Herrendorf, Berthold
PD   January 1998. TI   The Political Economy of Inflation and Central Bank Independence. AU   Herrendorf, Berthold; Neumann, Manfred J. M. AA   Herrendorf: University of Warwick. Neumann: University of Bonn. SR   Centre for Economic Policy Research Discussion Paper: 1787; 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   E24, E31, E52, E58. KW   Central Banks. Inflation Bias. Median Voter. Political Uncertainty. Unemployment.
AB   The authors study monetary policy-making in an economy with many sector-specific monopoly unions. It is assumed that the senior union members are in the majority and face a lower unemployment risk than junior members. Consequently, the unions' median voters are senior and set nominal wages that imply involuntary unemployment on part of the juniors. Thus, equilibrium unemployment is too high from a social welfare point of view. Nevertheless, an independent central bank is found not to produce an inflation bias because it is accountable to the majority of the population, which is not involuntarily unemployed. In contrast, government-dependence leads to an inflation bias and a higher variability of inflation, but has an ambiguous effect on employment variability. The reason is that democratic elections are about more than one policy issue, which is shown to give rise to political uncertainty about the monetary policy preferences of the elected government.

PD   April 1998. TI   Ruling Out Indeterminacy: The Role of Heterogeneity. AU   Herrendorf, Berthold; Valentinyi, Akos; Waldmann, Robert. AA   Herrendorf: University of Warwick and Centre for Economic Policy Research. Valentinyi: University of Southampton. Waldmann: Universita Bocconi. SR   University of Southampton Discussion Papers in Economics and Econometrics: 9803; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.as.uk/discp.html. PG   27. PR   on application. JE   D62, E32, O40. KW   Externalities. Growth. Business Cycles. Indeterminacy.
AB   Externalities can lead to indeterminacy, allowing self-fulfilling expectations to determine the equilibrium. This paper argues that the importance of indeterminacy might be overstated by the literature, as it does not recognize that heterogeneity across individuals can have a strong stabilizing effect. The authors illustrate this in a stylized two-sector economy with an externality by considering changes in the distribution of the individual entry costs into the two sectors. First, the authors find that the equilibrium is indeterminate (determinate) when the entry costs are relatively homogeneous

(heterogeneous) across individuals. Their second result is that for any neighborhood of any possible long-run outcome of the economy, there is a mean preserving spread of the entry cost distribution such that the unique steady state lies in that neighborhood and is saddle-path stable. This implies that the aggregate characteristics may not be informative even when there is determinacy.

Hilbers, Paul
TI   Some Issues in the Design of Monetary Instruments for the Operation of European Economic and Monetary Union. AU   Enoch, Charles; Hilbers, Paul; Kovanen, Arto.

PD   February 1998. TI   Financial Sector Reform and Monetary Policy in the Netherlands. AA   International Monetary Fund. SR   International Monetary Fund Working Paper: WP/98/19; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG   29. PR   not available. JE   E42, E52, E58, G21. KW   Financial Sector. Monetary Policy. Netherlands.
AB   Financial sector liberalization, both domestic and in cross-border transactions, was a major force behind the gradual move to indirect controls and the shift toward full reliance on exchange rate targeting in the Netherlands. This paper analyzes the different steps in this process, discusses the main arguments behind the gradual approach, and draws lessons for other countries involved in this process. The paper argues that reforms in the financial sector, liberalization of the capital account, adjustments in supervision and regulation, and modernization of monetary management are strongly interrelated and should be part of a comprehensive reform strategy.

Hillman, Arye L.
TI   Creating Illegal Immigrants. AU   Epstein, Gil S.; Hillman, Arye L.; Weiss, Avi.

TI   Herd Effects and Migration. AU   Epstein, Gil S.; Hillman, Arye L.

TI   The King Never Emigrates: Political Culture and the Reluctant International Movement of People. AU   Epstein, Gil S.; Hillman, Arye L.; Ursprung, Heinrich W.

Hoelscher, David S.
TI   Evolution of Monetary Policy Instruments in Russia. AU   Balino, Tomas J. T.; Hoelscher, David S.; Horder, Jakob.

Hoffmaister, Alexander W.
TI   Money, Wages and Inflation in Middle-Income Developing Countries. AU   Agenor, Pierre-Richard; Hoffmaister, Alexander W.

Holmes, Thomas J.
PD   March 1998. TI   A Gain from Trade: More Research, Less Obstruction. AU   Holmes, Thomas J.; Schmitz, James A., Jr.. AA   Holmes: University of Minnesota. Schmitz: Federal Reserve Bank of Minneapolis. SR   Federal Reserve Bank of Minneapolis Staff Report: 245; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. PG   55. PR   no charge. JE   F10, O30, O40. KW   Technology-Ladder Models. Gains From Trade. Protection Effects. Research.

AB There is an old wisdom that reductions in tariffs force changes on producers that lead to costless, or nearly so, increases in productivity. We construct a technology-ladder model that captures this wisdom. As in other technology-ladder models, time spent in research helps propel an industry up a technology-ladder. In contrast to the literature, we include another activity that plays a role in determining an industry's position on the technology-ladder: attempts to obstruct the research program of rivals (through regulations, for example). In this world, reductions in tariffs between countries lead producers to spend more time in research and less in obstruction of rivals.

Honjo, Keiko
TI The Efficiency of Government Expenditure: Experiences From Africa. AU Gupta, Sanjeev; Honjo, Keiko; Verhoeven, Marijn.

Horder, Jakob
TI Evolution of Monetary Policy Instruments in Russia. AU Balino, Tomas J. T.; Hoelscher, David S.; Horder, Jakob.

Horvath, Balazs
PD March 1998. TI Achieving Stabilization in Armenia. AU Horvath, Balazs; Thacker, Nita; Ha, Jiming. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/38; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 32. PR not available. JE E50, E63, E41. KW Transition Economy. Fiscal Impulse. Monetary Impulse. Currency Substitution.
AB This paper examines the evolution, and impact on stabilization, of macroeconomic policies in Armenia during 1994-96. Fiscal and monetary policies have been effective in stabilizing the Armenian economy and facilitating significant growth, although they have not always worked in cohort. Seigniorage and the inflation tax declined dramatically as inflation fell, while dollarization was reversed but reached a plateau after mid-1995, affecting the demand for dram. The paper also presents quantitative indicators, which are suggestive of the trends discussed.

Huang, Ling-Ling
TI Evaluation of Panel Data Models: Some Suggestions from Time Series. AU Granger, Clive W. J.; Huang, Ling-Ling.

Hubbard, R. Glenn
TI Inflation and the User Cost of Capital: Does Inflation Still Matter? AU Cohen, Darrel; Hassett, Kevin A.; Hubbard, R. Glenn.

Huggett, Mark
PD November 1997. TI On the Distributional Effects of Social Security Reform. AU Huggett, Mark; Ventura, Gustavo. AA Huggett: Centro de Investigacion Economica, Mexico. Ventura: University of Western Ontario. SR University of Western Ontario Department of Economics Research Reports: 9710; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.sscl.uwo.ca/economics. PG 44. PR $10.00 Canadian per paper. JE H55. KW Welfare Consumption.

Distributional Effects. Social Security.
AB How will the distribution of welfare consumption and leisure across households be affected by social security reform? This paper answers this question for a social security reform with a two-tier structure by comparing steady states under a realistic version of the current U.S. system and under the two-tier system. The first tier is a mandatory, defined-contribution pension offering a retirement annuity proportional to the value of taxes paid. Whereas the second tier guarantees a minimum retirement income. Our findings do not in general favor the implementation of pay-as-you go versions of the two-tier system for the U.S. The main findings are summarized in the introduction.

Hunt, Jennifer
PD February 1998. TI The Transition in East Germany: When is a Ten Point Fall in the Gender Wage Gap Bad News? AA Yale University. SR Centre for Economic Policy Research Discussion Paper: 1805; 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 J16, J23, J31, J70, P50. KW Employment. Wages. Gender Discrimination. Transition.
AB Since monetary union with West Germany on 1 July 1990, eastern female monthly wages have risen by 10 percentage points relative to male wages, but female employment has fallen 5 percentage points more than male employment. Using the German Socio-Economic Panel to study the years 1990-94, I show that along with age, the wage of a worker in 1990 is the most important determinant of the hazard rate from employment. Differences in mean 1990 wages explain more than one-half of the gender gap in this hazard rate, since low earners were more likely to leave employment, and were disproportionately female. The withdrawal from employment of low earners can explain 80% of the rise in relative female wages. There is no evidence that reduction in child care availability is a major factor in reducing female employment rates.

Hussain, Qaizar
PD December 1997. TI The Capital Structure of Listed Companies in Poland. AU Hussain, Qaizar; Nivorozhkin, Eugeniy. AA Hussain: International Monetary Fund. Nivorozhkin: Gothenburg University, Sweden. SR International Monetary Fund Working Paper: WP/97/175; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 27. PR not available. JE G30, G32, O12, O52. KW Poland. Stock Market. Capital Structure. Leverage.
AB This paper examines the capital structure of listed firms in Poland, using firm-level panel data to study the determinants of leverage. Polish firms had extremely low leverage levels, suggesting a growing stock market and a potential reluctance of banks to grant loans to old and risky firms. The empirical exercise finds that large, new, foreign- owned firms, and firms with strong cash positions have higher levels of leverage. Finally, shareholder concentration has a neutral or even a beneficial influence on firm leverage. The nature of ownership may be primarily responsible for this finding.

Ianni, Antonella
PD August 1997. TI Learning Correlated Equilibria in Normal Form Games. AA University of Southampton.

SR University of Southampton Discussion Papers in Economics and Econometrics: 9713; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton SO17 1BJ, England. Website: www.soton.as.uk/discp.html. PG 39. PR on application. JE C72, C73, D83. KW Learning. Population Games. Game Theory. Best Reply.

AB The authors analyze a population game as being constituted by a set of players, a normal form game and an interaction pattern. The latter specifies the way players are repeatedly matched in the population to play one shot of the normal form game. The authors first relate the set of equilibria of the population game to the set of correlated equilibria of the underlying game, and then focus on learning processes that are modeled as Markovian adaptive dynamics. For the class of doubly symmetric games, the authors formulate general conditions under which convergence is obtained under myopic best-reply dynamics. They also analyze noisy best-reply dynamics, where players' behavior is perturbed by payoff dependent mistakes, and explicitly characterize the ergodic distribution of the population game in terms of the correlated equilibrium payoffs of the underlying game. They conclude with some good examples.

Isaac, Mark R.
PD August 1997. TI Robustness of the Incentive Compatible Combinatorial Auction. AU Isaac, Mark R.; James, Duncan. AA University of Arizona. SR University of Arizona Economics Discussion Paper: 97/03; Patricia Blassingame, Discussion Paper Coordinator, University of Arizona, Department of Economics, McClelland Hall, Room 401, P.O. Box 210108, Tucson, AZ 85721-0108. PG 32. PR $2.00 U.S. and Canada; $3.00 Overseas by air. JE C92, D29. KW Combinatorial Auction. Incentive Compatible. Experimental Economics.

AB Goods are said to be combinatorial when the value of a bundle of goods is not equal to the sum of the values of the same goods unbundled. In layman's terms, the "whole" can be worth more or less than sum of the "parts". Investigations of combinatorial allocation problems should recognize that there are two separate aspects of such problems. The first aspect is an environmental distinction between multiple-unit allocation problems which involve combinatorial goods and those which do not do so. The second aspect is an institutional distinction between auctions in which combinatorial values can be expressed as part of the bidding rules and those in which they cannot. In 1982 Forsythe and Isaac reported the extension of the Vickrey auction into a demand-revealing, multiple unit, private goods auction that could incorporate combinatorial values. However, the Forsythe and Isaac version of the Vickrey combinatorial auction has never been tested in the field or in the laboratory, despite the fact that a laboratory test ought to be straightforward and should be informative not only about the Vickrey auction but should also contain information relevant to broader classes such as: other combinatorial auctions, non-combinatorial auctions designed to operate in the presence of combinatorial values, and other classes of dominant strategy mechanisms.

TI Asset Market Efficiency: The Effects of Tournament Incentives for Individuals. AU James, Duncan; Isaac, Mark R.

Ito, Takatoshi
TI The Bank of Canada's Monetary Policy Framework: Have Recent Changes Enhanced Central Bank Credibility? AU Gonzalez-Hermosillo, Brenda; Ito, Takatoshi.

Ize, Alain
PD March 1998. TI Dollarization of Financial Intermediation: Causes and Policy Implications. AU Ize, Alain; Levy-Yeyati, Eduardo. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/28; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 48. PR not available. JE E52, F36, F41, G11. KW Dollarization. Financial Intermediation. Asset Substitution.

AB This paper presents a portfolio model of financial intermediation in which currency choice is determined by hedging decisions on both sides of a bank's balance sheet. Minimum variance portfolio (MVP) allocations are found to provide a natural benchmark to estimate the scope for dollarization of bank deposits and loans as a function of macroeconomic uncertainty. Dollarization hysteresis is shown to occur when the expected volatility of the inflation rate is high in relation to that of the real exchange rate. The evidence shows that MVP dollarization generally approximates actual dollarization closely for a broad sample of countries, and policy implications are explored.

Izvorski, Ivailo
PD February 1998. TI Brady Bonds and Default Probabilities. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/16; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 24. PR not available. JE G10, G33. KW Brady Bonds. Default Probabilities. Sovereign Riskiness.

AB This paper computes the default probabilities implicit in the prices of Brady bonds of seven developing countries and examines the factors that determine the high cross-correlation of the probability paths. The term structure of U.S. interest rates and the ratio of long-term foreign debt to GDP, together with a developing market index, explain more than 75 percent of the cross-sectional distribution of the default probabilities. The paper also demonstrates a new way to extract sovereign riskiness, implicit in traded bond prices. This allows the above results to be interpreted as explaining the cross-sectional distribution of sovereign riskiness as well.

Jadresic, Esteban
PD February 1998. TI The Macroeconomic Consequences of Wage Indexation Revisited. AA Central Bank of Chile and International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/15; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 54. PR not available. JE E24, E31, E32, E52. KW Wages. Indexation. Macroeconomics.

AB Since the mid-1970's, there has been considerable research on the macroeconomic consequences of wage indexation. Nonetheless, until recently, this research had not explicitly explored the implications of contracts that index wages to lagged inflation, the usual type of wage indexation observed in practice. Drawing mainly on recent research by the author, this paper examines the consequences of wage indexation to lagged inflation on aggregate wage formation, the cost of disinflation under money- and exchange-rate-based

stabilization, the variability of output under alternative shocks and policy regimes, the choice of exchange rate regime, and the level and variability of inflation.

Jaffe, Adam B.

PD May 1997. TI Evidence from Patents and Patent Citations on the Impact of NASA and Other Federal Labs on Commercial Innovation. AU Jaffe, Adam B.; Fogarty, Michael S.; Banks, Bruce A. AA Jaffe: Brandeis University and National Bureau of Economic Research. Fogarty: Case Western Reserve University. Banks: NASA Lewis Research Center. SR National Bureau of Economic Research Working Paper: 6044; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE H89, L23, O31, O33, O34. KW Productivity. Patents. Commercialization. Knowledge Spillovers. Technological Innovation.

AB The authors explore the commercialization of government-generated technology by analyzing patents awarded to the U.S. government and the citations to those patents from subsequent patents. They use information on citations to federal patents in two ways: (1) to compare the average technological impact of NASA patents, "other Federal" patents, and a random sample of all patents using measures of "importance" and "generality;" and (2) to trace the geographic location of commercial development by focusing on the location of inventors who cite NASA and other federal patents. The authors find, first, that the evidence is consistent with increased effort to commercialize federal lab technology generally and NASA specifically. Second, spillovers are concentrated within a federal lab complex of states representing agglomerations of labs and companies. Third, qualitative evidence provides some support for the use of patent citations as proxies for both technological impact and knowledge spillovers.

Jagannathan, Ravi

TI Why Do Stock Prices Drop by Less than the Value of the Dividend? Evidence from a Country Without Taxes. AU Frank, Murray; Jagannathan, Ravi.

James, Duncan

TI Robustness of the Incentive Compatible Combinatorial Auction. AU Isaac, Mark R.; James, Duncan.

PD October 1997. TI Asset Market Efficiency: The Effects of Tournament Incentives for Individuals. AU James, Duncan; Isaac, Mark R. AA University of Arizona. SR University of Arizona Economics Discussion Paper: 97/11; Patricia Blassingame, Discussion Paper Coordinator, University of Arizona, Department of Economics, McClelland Hall, Room 401, P.O. Box 210108, Tucson, AZ 85721-0108. PG 38. PR $2.00 U.S. and Canada; $3.00 Overseas by air. JE G12. KW Asset Markets. Tournaments. Double Auction. Experiments.

AB Tournament incentives have been extensively analyzed, and recommended as policy, by economists and compensation consultants alike. Analysis of tournaments typically looks at the effect of tournament contracts for individuals on individual behavior in non-market settings (public good provision, team tasks, etc.). In contrast, this paper investigates the effect of tournament contracts for individual agents on market performance. In particular, we investigate the effect on asset market equilibrium of individual contracts that reward "beating the market". We do so by means of both game theory and laboratory experiments. The game theoretic prediction that the rational expectations equilibrium is destroyed by the introduction of "beat the market" contracts is overwhelmingly supported by the experimental data.

Jellal, Mohamed

PD April 1997. TI Demand Uncertainty, Mismatch, and (Un)Employment. AU Jellal, Mohamed; Thisse, Jacques-Francois; Zenou, Yves. AA Jellal: Universite de Rabat. Thisse: Universite Catholique de Louvain and CERAS, Ecole Nationale des Ponts et Chaussees. SR Universite Catholique de Louvain CORE Discussion Paper: 9733; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 24. PR $100 per year. JE I28, J23, J41, J64, L13. KW Job Matching. Demand Shocks. Unemployment. Imperfect Markets. Heterogeneous Workers.

AB We consider a finite number of firms which compete imperfectly for heterogeneous workers. Firms produce a homogeneous good sold on a competitive market and face demand-induced price fluctuations. It is then shown that unemployment may arise in equilibrium because of uncertainty on product demand and job mismatch. However, unemployment does not arise when the variance of the demand shock is small enough and/or the cost of mismatch is sufficiently low. Full employment always prevails when there is free entry. Hence, unemployment may persist as long as the incumbent firms choose their skill requirements to protect their supranormal profits.

Jenkins, Stephen P.

TI New Men and New Women? A Comparison of Paid Work Propensities From a Panel Data Perspective. AU Booth, Alison L.; Serrano, Carlos Garcia; Jenkins, Stephen P.

Jeon, Yongil

TI The Relationship Between Air Pollution Emissions and Income: U.S. Data. AU Carson, Richard T.; Jeon, Yongil.

TI Measuring Lag Structure in Forecasting Models -- the Introduction of Time Distance. AU Granger, Clive W. J.; Jeon, Yongil.

Jing-Yuan, Wei

TI Spatially Oligopolistic Model With Opportunity Cost Pricing for Transmission Capacity Reservations -- A Variational Inequality Approach. AU Smeers, Yves; Jing-Yuan, Wei.

Jochum, Christian

PD February 1998. TI Does the Introduction of Futures on Emerging Market Currencies Destabilize the Underlying Currencies? AU Jochum, Christian; Kodres, Laura. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/13; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 39. PR not available. JE C22, G15. KW Volatility Spillover. Emerging Markets. SWARCH.

AB Recent interest in futures contracts on emerging market currencies has raised concerns among some central bank

authorities about their ability to maintain stable currencies. This paper presents empirical results examining the influence of the Mexican peso, the Brazilian real, and the Hungarian forint futures contracts on the respective spot markets. While measures of linear dependence and feedback indicate strong connections between the respective markets, futures volatility does not significantly explain spot market volatility, nor does it increase after futures introductions. To account for the characteristics of the spot and futures returns a SWARCH model has been employed to estimate volatility.

Johal, Surjinder
PD April 1998. **TI** Tying Governments' Hands: Why Harmonisation of Environmental Policies May Be Desirable. **AU** Johal, Surjinder; Ulph, Alistair. **AA** University of Southampton. **SR** University of Southampton Discussion Papers in Economics and Econometrics: 9802; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton SO17 1BJ, England. Website: www.soton.as.uk/discp.html. **PG** 31. **PR** on application. **JE** F10, H77, L51, Q28. **KW** Environmental Policy. Harmonization. Asymmetric Information. Political Economy. Intergovernmental Relations.
AB The authors consider environmental policy in a federal system where states face purely domestic environmental problems. It is normally argued that environmental policy is best set at the state level, perhaps because of better local information. This paper assumes that governments at state and federal level can be influenced by pressure groups. Depending on which group's interests are represented by the government in power, a government may give too high or too low a weight to environmental damages relative to its weight in social welfare. The true value of environmental damage costs in each state is private information to the state government which comes into power. There is then a choice between allowing governments to set environmental policy using the information they acquire about damage costs or tying governments hands by prescribing welfare maximizing policies. The authors show that it is better to set environmental policy at the federal level.

Johnsen, Thore
TI Productivity Growth, Consumer Confidence and the Business Cycle. **AU** Danthine, Jean-Pierre; Donaldson, John B.; Johnsen, Thore.

Johnson, Omotunde E. G.
PD December 1997. **TI** Policy Reform as Collective Action. **AA** University of Oxford and International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/163; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 28. **PR** not available. **JE** D72, D78, O23. **KW** Policy Reform. Government.
AB A government desiring support for its policy reform program, without coercion, behaves as if it faces a political constraint. Citizen support depends on the estimate, by at least some minimum proportion of the population, that the program will succeed and the outcome will be in their individual self-interest. Government behavior has implications for the program, whose contents constitute the set of signals used by citizens to estimate the probability that the program will succeed. The government uses various devices to mobilize support for its program. An informed expert could design a program acceptable to both the government and the citizens.

Johnston, R. Barry
PD November 1997. **TI** Sequencing Capital Account Liberalization: Lessons From the Experiences in Chile, Indonesia, Korea, and Thailand. **AU** Johnston, R. Barry; Darbar, Salim M.; Echeverria, Claudia. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/157; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 115. **PR** not available. **JE** E52, F21, F31, G28. **KW** Financial Sector. Currency Convertibility. Capital Flows.
AB This paper examines issues in sequencing and pacing capital account liberalization and draws lessons from experience in four countries (Chile, Indonesia, Korea, and Thailand). The paper focuses on the interrelationship between capital account liberalization, domestic financial sector reforms, and the design of monetary and exchange rate policy. It concludes that capital account liberalization should be approached as an integrated part of comprehensive reform strategies and should be paced with the implementation of appropriate macroeconomic and exchange rate policies.

Jordan, James S.
TI The Existence of Rational Expectations Equilibrium: A Retrospective. **AU** Allen, Beth; Jordan, James S.

Jouneau, Frederic
TI Estimation of a Latent Linear Model Based on the Rank Statistics of the Dependent Variable. **AU** Broze, Laurence; Jouneau, Frederic.

Jouvet, Pierre-Andre
PD June 1997. **TI** Intergenerational Altruism and the Environment. **AU** Jouvet, Pierre-Andre; Michel, Philippe; Vidal, Jean-Pierre. **AA** Jouvet: University of Lille III. Michel: University of Aix-Marseille II. Vidal: University of Cambridge and CEME, University of Paris I. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9741; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 23. **PR** $100 per year. **JE** D62, D64, D91. **KW** Altruism. Environment. Overlapping Generations. Pollution.
AB This paper constructs an overlapping generations model of pollution externality wherein individuals are altruistically linked to their off-spring as in Barro (1974). It is shown that steady-state consumption can be a decreasing function of the intergenerational degree of altruism. Despite individuals' altruism, the competitive equilibrium is not optimal. The authors thus study the social optimum and prove that it can be decentralized.

Joyce, Theodore
PD May 1997. **TI** Impact of Augmented Prenatal Care on Birth Outcomes of Medicaid Recipients in New York City. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6029; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** $5.00. **JE** H51, I12, I18. **KW** Health. Medicaid. Prenatal Care. Birth Outcomes.
AB The author examines whether New York State's Prenatal Care Assistance Program (PCAP) is associated with greater use

of prenatal services and improved birth outcomes. PCAP is New York State's augmented prenatal care initiative that became a part of the Medicaid program after expansion in income eligibility thresholds. Data are from the linkage of Medicaid administrative files with New York City birth certificates. For women on cash assistance, the author finds PCAP is associated with a 20 percent increase in the likelihood of enrollment in WIC, an increase in mean birth weight of 35 grams and a 1.3 percentage point drop in the rate of low birth weight. Associations between PCAP and improved birth outcomes for women on medical assistance are similar, but appear contaminated by selection bias. Reductions in newborn costs associated with PCAP participation are modest, between $100-$300 dollars per recipient, and are insufficient to offset program expenditures.

Justman, Moshe
PD April 1997. TI Local Public Funding of Higher Education When Skilled Labor is Mobile. AU Justman, Moshe; Thisse, Jacques-Francois. AA Justman: University of Negev Beer Sheva. Thisse: Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9724; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 22. PR $100 per year. JE H77, I22, I28, J61. KW Labor Mobility. Education. Public Funding.
AB Inter-jurisdictional labor mobility when public funding of higher education is sub-federal leads to a disparity between the centralized output-maximizing allocation of resources to education and decentralized equilibria. We show that when local governments choose their level of spending on higher education at a Nash equilibrium, the size and direction of this disparity depend strongly on the political balance of forces at the sub-federal level. The more common case of underinvestment can be alleviated through inter-jurisdictional subsidies of local education expenditures based on net migration flows.

Kajii, Atsushi
TI On the Skiadal "Conditional Preference Approach" to Choice Under Uncertainty. AU Grant, Simon; Kajii, Atsushi; Polak, Ben.

Kaminsky, Graciela L.
TI A Switching Regime Model for the Spanish Inflation: 1962-1997. AU Ayuso, Juan; Kaminsky, Graciela L.; Lopez-Salido, J. David.

Kane, Edward J.
PD April 1997. TI Ethical Foundations of Financial Regulation. AA Boston College and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6020; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 31. PR $5.00. JE D82, G28, L51, L52. KW Corporate Finance. Financial Regulation. Agency Costs. Asymmetric Information. Altruism.
AB Economic theory offers two complementary rationales for regulating financial institutions. Altruistic public-benefits theories treat rules as governmental instruments for increasing fairness and efficiency across society as a whole. In contrast, agency-cost theory recognizes that incentive conflicts and coordination problems arise in multi-party relationships and that regulation introduces opportunities to impose rules that enhance the welfare of one sector of society at the expense of another. In financial services, markets for regulatory services produce outside discipline that controls and coordinates industry behavior. Institutions benefit from regulation that: enhances customer confidence; increases the convenience of customer transactions; or generates cartel profits. Agency-cost theories emphasize the need to reconcile conflicts between the interests of institutions, customers, regulators, and taxpayers. To overcome nontransparency and disinformation in the performance measurements that government regulators are permitted to transmit to taxpayers, society must strive to allocate regulatory rights, duties, and rewards in ways that reduce agency costs.

Karanassou, Marika
PD March 1998. TI How Labour Market Flexibility Affects Unemployment: Long-Term Implications of the Chain Reaction Theory. AU Karanassou, Marika; Snower, Dennis J. AA Karanassou: Birkbeck College and University of London. Snower: Birkbeck College, London. SR Centre for Economic Policy Research Discussion Paper: 1826; 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 J21, J23, J31, J64, J68. KW Unemployment. Employment. Wage Setting. Participation. Labor Markets.
AB This paper evaluates two theories of unemployment: the natural rate theory (whereby unemployment is depicted as fluctuating around a reasonably stable natural rate) and the chain reaction theory (which views movements in unemployment as the outcome of the interplay between labor market shocks and a network of lagged adjustment processes). The authors show that, for labor market systems with two common characteristics - lagged endogenous variables and growing exogenous variables - lags affect unemployment not only in the short run, but in the long run as well. The reason is that the lagged responses are never able to work themselves out entirely. In this respect, the chain reaction theory contrasts sharply with the natural theory, which commonly views unemployment as approaching a natural rate determined solely by the values of the exogenous variables. The policy implications of the two theories are quite different as well.

Karatzas, I.
TI A Strategic Market Game With Active Bankruptcy. AU Geanakoplos, John; Karatzas, I.; Shubik, Martin; Sudderth, W.

Keane, Michael
TI An Empirical Analysis of Income Dynamics Among Men in the PSID: 1968-1989. AU Geweke, John; Keane, Michael.

TI Mixture of Normals Probit Models. AU Geweke, John; Keane, Michael.

Keen, Michael
PD December 1997. TI Vertical Tax Externalities in the Theory of Fiscal Federalism. AA University of Essex, Institute for Fiscal Studies, London and International Monetary

Fund. **SR** *International Monetary Fund Working Paper:* WP/97/173; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 35. **PR** not available. **JE** H21, H30, H70. **KW** Tax Externalities. Fiscal Federalism.
AB Vertical tax externalities between levels of government can occur in federal structures, with responses to the tax policies of one level of government affecting the tax base of the other. Such effects mostly arise when federal and state governments co-occupy the same tax base. This paper examines these externalities by considering their implications for a range of issues in fiscal federalism: the relationship between state and federal tax rates, the equilibrium levels of these taxes, the relevance of experience in federal countries for policy design in international settings, intergovernmental grants, and the assignment of tax powers among levels of government.

Kehoe, Patrick J.
TI Hot Money. **AU** Chari, V. V.; Kehoe, Patrick J.

TI Models of Energy Use: Putty-Putty vs. Putty-Clay. **AU** Atkeson, Andrew; Kehoe, Patrick J.

TI Hot Money. **AU** Chari, V. V.; Kehoe, Patrick J.

TI Optimal Fiscal and Monetary Policy. **AU** Chari, V. V.; Kehoe, Patrick J.

TI Paths of Development for Early- and Late-Bloomers. **AU** Atkeson, Andrew; Kehoe, Patrick J.

Kelsey, David
PD September 1997. **TI** Uncertainty in Partnerships. **AU** Kelsey, David; Spanjers, Willy. **AA** Kelsey: University of Birmingham. Spanjers: University of Saarland. **SR** University of Birmingham, Department of Economics Discussion Paper: 97/16; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. Website: www.bham.ac.uk/economics. **PG** 45. **PR** 2 pounds; no charge to academics. **JE** D23, D81, D82. **KW** Partnerships. Knightian Uncertainty. Choquet Integral. Production Functions. Sharing.
AB In this paper the authors analyze the consequences of Knightian uncertainty for partnerships. In particular, partnerships with symmetric linear production functions are analyzed in a CEU framework. The authors propose an extension of Nash equilibrium in pure strategies for CEU-games with strategic uncertainty. They find that the presence of uncertainty does not change equilibrium choices of effort levels of partnerships with a linear sharing rule. For partnerships that face structural uncertainty, the authors propose sharing rules that use the uncertainty constructively. For these sharing rules, results on ex-ante and ex-post efficiency as well as coordination proofness of the outcomes are derived.

Kerstens, Kristiaan
PD February 1997. **TI** Estimating Returns to Scale Using Nonparametric Deterministic Technologies: A New Method Based on Goodness-of-Fit. **AU** Kerstens, Kristiaan; Vanden Eeckaut, Philippe. **AA** Kerstens: Universite Catholique de Lille. Vanden Eeckaut: Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9713; Center for Operations Research and

Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 17. **PR** $100 per year. **JE** D24. **KW** Returns to Scale. Data Envelopment Analysis. Reference Technologies. Free Disposal Hull.
AB The purpose of this note is to define a new and more general method to obtain qualitative information about returns to scale for individual observations. In a second section the traditional methods developed for estimating returns to scale on nonparametric deterministic reference technologies (Data Envelopment Analysis (DEA) models) are reviewed. Section 3 provides a new and more general method that is suitable for all reference technologies. Its usefulness is illustrated by considering variations on an existing non-convex production model, known as the Free Disposal Hull (FDH). When different returns to scale assumptions are introduced into the FDH, then previous methods for determining returns to scale no longer apply.

Keuschnigg, Christian
PD January 1998. **TI** Eastern Enlargement of the EU: How Much is it Worth for Austria? **AU** Keuschnigg, Christian; Kohler, Wilhelm. **AA** Keuschnigg: University of Saarland. Kohler: Universityof Linz. **SR** Centre for Economic Policy Research Discussion Paper: 1786; 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** C68, F13, F15. **KW** European Integration. Eastern Enlargement. Dynamic Trade. General Equilibrium. European Monetary Union.
AB We evaluate potential costs and benefits of Eastern enlargement of the EU. In addressing fiscal costs of enlargement in addition to tariff and non-tariff barriers, we arrive at important conclusions: 1) Overall, extending EU membership to Eastern applicants is more than worth its price to Austria. The (dynamic) gains from integration clearly outweigh the budgetary costs. 2) Somewhat surprisingly, the wage spread between skilled and unskilled labor is narrowed rather than widened. 3) Significant sectoral and intergenerational redistribution may nevertheless render EU enlargement difficult on political grounds, with the agricultural sector and the young losing out.

Khalil, Fahad
TI Contracts and Productive Information Gathering. **AU** Cremer, Jacques; Khalil, Fahad; Rochet, Jean-Charles.

TI Strategic Information Gathering Before a Contract is Offered. **AU** Cremer, Jacques; Khalil, Fahad; Rochet, Jean-Charles.

Khan, M. Ali
PD February 1997. **TI** On Loeb Measure Spaces and Their Significance for Non-Cooperative Game Theory. **AU** Khan, M. Ali; Sun, Yeneng. **AA** Khan: The Johns Hopkins University. Sun: National University of Singapore and Yale University. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9712; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 30. **PR** $100 per year. **JE** C72. **KW** Noncooperative Games. Game Theory. Measure Space.

AB In this expository paper, Loeb measure spaces are constructed on the basis of sequences, and shown to satisfy many useful properties, including some regularity properties of correspondences involving distribution and integration. It is argued that Loeb measure spaces can be effectively and systematically used for the analysis of game- theoretic situations in which "strategic negligibility" and/or "diffuseness" of information are substantive and essential issues. Positive results are presented, and the failure of analogous results for identical models based on Lebesgue measure spaces is illustrated by several examples. It is also pointed out that the requirement of Lebesgue measurability, by going against the non-cooperative element in the situation being modeled, is partly responsible for this failure.

Kilian, Lutz

PD January 1998. TI Is There a Trend Break in U.S. GNP? A Macroeconomic Perspective. AU Kilian, Lutz; Ohanian, Lee E. AA Kilian: University of Michigan. Ohanian: Federal Reserve Bank of Minneapolis and University of Minnesota. SR Federal Reserve Bank of Minneapolis Staff Report: 244; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. PG 28. PR no charge. JE C15, C22, E32. KW Unit Roots. Trend-Breaks. Transitory Shocks.
AB Unit root tests against trend break alternatives are based on the premise that the dating of the trend breaks coincides with major economic events with permanent effects on economic activity, such as wars and depressions. Standard economic theory, however, suggests that these events have large transitory, rather than permanent, effects on economic activity. Conventional unit root tests against trend break alternatives based on linear ARIMA models do not capture these transitory effects and can result in severely distorted inference. We quantify the size distortions for a simple model in which the effects of wars and depressions can reasonably be interpreted as transitory. Monte Carlo simulations show that in moderate samples, the widely used Zivot-Andrews (1992) test mistakes transitory dynamics for trend breaks with high probability. We conclude that these tests should be used only if there are no plausible economic explanations for apparent trend breaks in the data.

Kim, Soyoung

PD March 1998. TI Monetary Policy Rules and Business Cycles. AA University of Urbana-Champaign. SR Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9804; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid, Spain. Website: www.bde.es. PG 26. PR Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. JE E32, E52. KW Monetary Policy. Business Cycles.
AB Business cycle properties under different monetary policy rules are examined in a variety of dynamic stochastic general equilibrium models. The experiments show that nominal and real features of business cycles are substantially different under different monetary policy rules. In particular, the business cycle properties under the AR-1 rule are substantially different from the business cycle properties under the realistic monetary policy rule estimated from data, allowing endogenous reactions to the state of economy. Regarding the real features of business cycles, the changes under different monetary policy rules are as large as the changes generated from introducing rigidities and monetary disturbances. Other experiments show that the presence of the nominal liquidity effect may critically depend on the specification of monetary policy rules and that the movements of real variables can be substantially different under different monetary policy rules even in the case of small nominal rigidities.

PD May 1998. TI Identifying European Monetary Policy Interactions: French and Spanish System with German Variables. AA University of Urbana-Champaign. SR Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9811; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid, Spain. Website: www.bde.es. PG 22. PR Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. JE E52, F33, F40. KW Monetary Policy. Exchange Rates. Europe. Shocks.
AB This paper develops the "identified VAR" models of France and Spain with German monetary variables to identify monetary policy shocks during the period when the exchange rate is controlled mostly by the ERM. Different identifying assumptions on the contemporaneous policy interaction are experimented. The impulse responses to monetary policy shocks and estimated parameters of the monetary reaction function suggest that the identification scheme implying unilateral contemporaneous reactions of non-German monetary policies to the exchange rate against DM and the German interest rate and the identification scheme implying contemporaneous reactions of non-German monetary authority and the German interest rate to the bilateral exchange rates seem reasonable identifying assumptions in these countries. Regarding exchange rate stabilization or policy interactions in a general sense, the results suggest that the FF/DM and Ptas/DM exchange rates are stabilized mostly by French and Spanish monetary policy (more vigorously by Spanish authority).

Kinnaman, Thomas C.

PD April 1997. TI Curbside Recycling and Unit-Based Pricing. AU Kinnaman, Thomas C.; Fullerton, Don. AA Kinnaman: Bucknell University. Fullerton: University of Texas, Austin and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6021; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG not available. PR $5.00. JE E61, H71, Q28. KW Public Economics. Recycling. User Fees. Garbage. Endogenous Policy.
AB This paper estimates the impact of a user fee and a curbside recycling program on garbage and recycling amounts, allowing for the possibility of endogenous policy choices. Previous estimates of the effects of these policies could be biased if unobserved variables jointly impact the probability of implementing these policies and the levels of garbage and recycling collected. A simple sequential model of local policymaking is estimated using original data gathered from a large cross-section of communities with user fees, combined with an even larger cross-section of towns without user fees but with and without curbside recycling programs. Without correction for endogenous policy, the price per unit of garbage collection has a negative effect on garbage and a positive cross-price effect on recycling. When endogenous policy is

corrected for, then the effect of the user fee on garbage increases, and the significance of the cross-price effect on recycling disappears.

Klemperer, Paul
TI The Winner's Curse and the Failure of the Law of Demand. AU Bulow, Jeremy; Klemperer, Paul.

Klinger Monteiro, Paulo
PD February 1997. TI Optimal Selling Mechanisms for Multiproduct Monopolists: Incentive Compatibility in the Presence of Budget Constraints. AU Klinger Monteiro, Paulo; Page, Frank H., Jr.. AA Klinger: Universite Catholique de Louvain. Page: University of Alabama, Tuscaloosa. SR Universite Catholique de Louvain CORE Discussion Paper: 9711; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 23. PR $100 per year. JE D42, L12. KW Multiproduct Monopoly. Incentive Compatibility. Selling Mechanisms.
AB We demonstrate the existence of an optimal, individually rational, and incentive compatible selling mechanism for a multiproduct monopolist facing a market populated by consumers with budget constraints. Our main contribution is to show that, in general, when facing consumers with budget constraints the monopolist is able to maximize profits over the set of individually rational and incentive compatible selling mechanisms only if other goods are available and only if the monopolist's goods are nonessential relative to other goods.

PD June 1997. TI Optimal All-Pay Auction When Signals are Correlated. AA Universite Catholique de Louvain and IMPA, Brazil. SR Universite Catholique de Louvain CORE Discussion Paper: 9742; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 7. PR $100 per year. JE D44. KW Auctions. Signaling.
AB In this note the author proves the existence of the optimal-pay auction when signals are correlated.

PD June 1997. TI Discreteness of Equilibria in Incomplete Markets With a Continuum of States. AU Klinger Monteiro, Paulo; Pascoa, Mario R. AA Klinger: Universite Catholique de Louvain and IMPA, Brazil. Pascoa: Universidade Nova de Lisboa. SR Universite Catholique de Louvain CORE Discussion Paper: 9743; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 7. PR $100 per year. JE D52. KW General Equilibrium. Incomplete Markets. Local Uniqueness.
AB The authors discuss the issue, raised by Mas-Calell (1991) whether the local uniqueness (relative to the L superscript infinity topology) may be a generic property of equilibria in incomplete markets economies with a continuum of states.

Kocherlakota, Narayana
PD February 1998. TI Why Do Different Countries Use Different Currencies? AU Kocherlakota, Narayana; Krueger, Thomas. AA Kocherlakota: Federal Reserve Bank of Minneapolis. Krueger: International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/17; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 22. PR not available. JE D82, E40, E42, F33. KW Money. Random Matching. Heterogenous Preferences. Currency Union. EMU.
AB During long periods of history, countries have pegged their currencies to an international standard (such as gold or the U.S. dollar), severely restricting their ability to create money and affect output, prices, or government revenue. Nevertheless, countries generally have heterogeneous preferences -- that are private information -- over goods of different national origin. In this environment, it may be optimal for countries to have different currencies; we also identify conditions where separate national currencies do not expand the set of optimal allocations. Implications for a currency union in Europe are discussed.

TI Efficient Allocations with Hidden Income and Hidden Storage. AU Cole, Harold L.; Kocherlakota, Narayana.

TI Dynamic Games with Hidden Actions and Hidden States. AU Cole, Harold L.; Kocherlakota, Narayana.

Kodres, Laura
TI Does the Introduction of Futures on Emerging Market Currencies Destabilize the Underlying Currencies? AU Jochum, Christian; Kodres, Laura.

Koen, Vincent
PD November 1997. TI Prices in the Transition: Ten Stylized Facts. AU Koen, Vincent; De Masi, Paula R. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/158; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 31. PR not available. JE E31, P22, R32. KW Inflation. Prices. Transition.
AB The overall price level increased sharply in transition countries once prices were freed. Disinflation has most frequently been gradual, with prices continuing to rise rapidly in subsequent years. This paper identifies the well-known and lesser-known features of inflationary processes in central and eastern Europe, the Baltic's, Russia, and other countries of the former Soviet Union on the basis of a sample of 26 countries and observations spanning the first five to seven years of transition.

Kohler, Wilhelm
TI Eastern Enlargement of the EU: How Much is it Worth for Austria? AU Keuschnigg, Christian; Kohler, Wilhelm.

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

Kolstad, C. D.
TI The Demand for Synthetic Fuels: Contingent Valuation of Quality- Differentiated Factors of Production. AU Braden, J. B.; Kolstad, C. D.; Woock, R. A.; Machado, J. A.

Konings, Jozef
PD December 1997. TI Competition and Firm Performance in Transition Economies: Evidence from Firm Level Surveys in Slovenia, Hungary and Romania. AA Konings: LICOS, Katholieke Universiteit Leuven.

SR Centre for Economic Policy Research Discussion Paper: 1770; 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 L11, L33, O12, P21. KW Competition. Ownership. Performance. Transition.

AB In this paper firm level data are used to test whether competition affects productivity performance in three transition countries, Hungary, Romania and Slovenia. The data are based on interviews taken in more than 300 state-owned, privatized and newly-established private firms between September 1996 and April 1997. The paper finds evidence that long-run competitive pressure has a positive impact on firm performance in Hungary and Slovenia, but not in Romania, while in Romania short-run competitive pressure has a positive impact on performance. The paper also finds evidence that ownership matters. Traditional firms (being state-owned and privatized enterprises) tend to perform worse than newly-established firms in Hungary and Slovenia. In Romania, the results are somewhat mixed; state-owned enterprises do worse than employee-owned (privatized) and newly-established private firms.

Korenman, Sanders

PD May 1997. TI Cohort Crowding and Youth Labor Markets: A Cross-National Analysis. AU Korenman, Sanders; Neumark, David. AA Korenman: Baruch College, CUNY and National Bureau of Economic Research. Neumark: Michigan State University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6031; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 32. PR $5.00. JE J11, J21, J23, J31, J64. KW Labor Markets. Demographic Trends. Employment. Labor Supply. Age Structure.

AB The authors assess the evidence on the contribution of changes in the population age structure to the changing fortunes of youths in labor markets in the advanced economies over the 1970's, 1980's, and early 1990's, and use this evidence to project the likely effects of future cohort sizes on youth labor markets. The authors estimate a series of regression models in order to isolate the effects of exogenous changes in potential youth labor supply on youth employment and unemployment rates, using a panel data set on 15 countries over more than 20 years. Their preferred estimates indicate that large youth cohorts lead to increases in the unemployment rate of youths, with elasticities as high as .5 or .6. On the other hand, the estimates generally indicate little effect of relative cohort size on employment rates of youths.

Kovanen, Arto

TI Some Issues in the Design of Monetary Instruments for the Operation of European Economic and Monetary Union. AU Enoch, Charles; Hilbers, Paul; Kovanen, Arto.

Kramarz, Francis

PD December 1997. TI New Technologies, Wages and Worker Selection. AU Kramarz, Francis; Entorf, Horst; Gollac, Michel. AA Kramarz: INSEE. Entorf: University of Mannheim. Gollac: CEE. SR Centre for Economic Policy Research Discussion Paper: 1761; 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 J31, J64, O33. KW Computers.

Wages. Unemployment. Technological Change.
AB We study the impact of new technologies (NT) on wages and employment using a unique panel that matches data on individuals and on their firms. As found in the United States (Krueger (1993)), we show that computer users are better paid than non-users (between 15% and 20% more). But we also show that these workers were already better compensated before the introduction of the NT's. Total returns to computer use amount to 2%. Even when possible measurement errors are taken into account, total returns cannot exceed 4%, which is far from the cross-section estimates. Furthermore, computer users are protected from job losses as long as bad business conditions do not last too long. This result holds even after controlling for possible selection biases. .

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

Krueger, Thomas
TI Why Do Different Countries Use Different Currencies? AU Kocherlakota, Narayana; Krueger, Thomas.

Krusell, Per

PD July 1997. TI On the Size of U.S. Government: Political Economy in the Neoclassical Growth Model. AU Krusell, Per; Rios-Rull, Jose-Victor. AA Krusell: University of Rochester, Centre for Economic Policy Research and Institute for International Economic Studies. Rios-Rull: Federal Reserve Bank of Minneapolis and University of Pennsylvania. SR Federal Reserve Bank of Minneapolis Staff Report: 234; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. PG 37. PR no charge. JE D31, D72, E62. KW Transfers. Dynamic Endogenous Policy. Political Economy.

AB We study a dynamic version of Meltzer and Richard's median-voter analysis of the size of government. Taxes are proportional to total income, and they are used for government consumption, which is exogenous, and for lump-sum transfers, whose size is chosen by electoral vote. Votes take place sequentially over time, and each agent votes for the policy that maximizes his equilibrium utility. We calibrate the model and its income and wealth distribution to match postwar U.S. data. This allows a quantitative assessment of the equilibrium costs of redistribution, which involves distortions to the labor-leisure and consumption-savings choices, and of its benefits for the decisive voter. We find that the total size of transfers predicted by our political-economy model is quite close to the size of transfers in the data.

PD September 1997. TI Capital-Skill Complementarity and Inequality: A Macroeconomic Analysis. AU Krusell, Per; Ohanian, Lee E.; Rios-Rull, Jose-Victor; Violante, Giovanni L. AA Krusell: University of Rochester and Institute for International Economic Studies. Ohanian: University of Minnesota and Federal Reserve Bank of Minneapolis. Rios-Rull: Federal Reserve Bank of Minneapolis and University of Pennsylvania. Violante: University College, London. SR Federal Reserve Bank of Minneapolis Staff Report: 239; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. PG 48. PR no charge. JE J31, O41. KW Capital Skill Complementarity.

Wage Inequality. Skill Biased Technological Change.

AB The notion of skilled-biased technological change is often held responsible for the recent behavior of the U.S. skill premium, or the ratio between the wages of skilled and unskilled labor. This paper develops a framework for understanding this notion in terms of observable variables and uses the framework to evaluate the fraction of the skill premium's variation that is caused by changes in observables. A version of the neoclassical growth model is used in which the key feature of aggregate technology is capital skill complementarity: the elasticity of substitution is higher between capital equipment and unskilled labor than between capital equipment and skilled labor. With this feature, changes in observables can account for nearly all the variation in the skill premium over the last 30 years. This finding suggests that increased wage inequality results from economic growth driven by new, efficient technologies embodied in capital equipment.

Laidler, David

PD November 1997. **TI** The Wicksell Connection, The Quantity Theory and Keynes. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Reports: 9708; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.sscl.uwo.ca/economics. **PG** 34. **PR** $10.00 Canadian per paper. **JE** none available. **KW** Quantity Theory. Wicksell Connection. Keynes.
AB none available.

Lall, Subir

PD December 1997. **TI** Speculative Attacks, Forward Market Intervention and the Classic Bear Squeeze. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/164; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 37. **PR** not available. **JE** E44, F31, G12, G13, G15, G20. **KW** Speculative Attacks. Forward Markets. Exchange Rates. Market Corners.
AB A typical strategy used by speculators to launch an attack on a fixed exchange regime is the use of forward markets. Central banks also intervene in forward markets to counter speculation. This paper addresses the question of how an attack is launched on the forward market, and what the optimal policy response to such speculation is in the forward and spot markets. The paper also demonstrates how central banks can impose a bear squeeze on speculators. Recent events in South East Asian currency markets are interpreted within the framework of the model's predictions.

Lange, Joe

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

Larsen, Jens D. J.

PD May 1997. **TI** Labour Markets with Turnover Costs and Fixed Wage Contracts -- A General Equilibrium Model. **AA** University of Southampton. **SR** University of Southampton Discussion Papers in Economics and Econometrics: 9706; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.as.uk/discp.html. **PG** 33.

PR on application. **JE** C68, E24, E32, J31, J41. **KW** General Equilibrium. Business Cycles. Turnover Costs. Contracts. Renegotiation.
AB This paper investigates the effects of linear turnover costs in employment in a competitive general equilibrium framework. With linear turnover costs, the Williamson (1975) hold-up issue can arise and firms may invest inefficiently. A renegotiable fixed wage contract can, as described by MacLeod and Malcomson (1993), establish efficient employment and investment decisions. A computable general equilibrium model with these features is constructed and analyzed theoretically and quantitatively. As in the risk insurance literature, it is found that fixed wage contracts dampen the fluctuations in the average wage and ensure that the correlation between output and wages is less than perfect. Relative to the risk insurance approach to contracts, this offers an alternative extension and improvement of the standard competitive general equilibrium models.

PD April 1998. **TI** The Macroeconomic Implications of Turnover Costs and Wage Contracts. **AA** University of Southampton. **SR** University of Southampton Discussion Papers in Economics and Econometrics: 9805; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.as.uk/discp.html. **PG** 44. **PR** on application. **JE** C68, E24, E32, J41, J63. **KW** General Equilibrium. Turnover Costs. Wage Contracts. Renegotiation.
AB In a labor market characterised by linear turnover costs in employment, the hold-up issue may arise and firms may invest inefficiently. This paper introduces hiring and firing costs in a dynamic general equilibrium, and analyses the effects of two different contractual arrangements, employment at will and fixed wage contracts, that both ensure efficient investment and employment decisions. While the arrangements have different implications for wage dynamics, they imply identical employment and investment allocations due to their efficiency properties. The model replicates the dynamic behavior of U.S. labor market variables, including measures for hiring and firing. In terms of aggregate wage statistics, both contractual arrangements generate near zero correlation between the average wage and output, and dampen the fluctuations in the average wages, but can be distinguished by the implied distributions of wage changes. Only the fixed wage contract generates a spike at zero wage changes for job stayers.

Lau, Lawrence J.

TI Reform Without Losers: An Interpretation of China's Dual-Track Approach to Transition. **AU** Qian, Yingyi; Roland, Gerard; Lau, Lawrence J.

Laurens, Bernard

PD March 1998. **TI** Coordination of Monetary and Fiscal Policies. **AU** Laurens, Bernard; de la Piedra, Enrique G. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/98/25; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 32. **PR** not available. **JE** E58, E62. **KW** Monetary Policy. Fiscal Policy. Coordination.
AB Recently, monetary authorities have increasingly focused on implementing policies to ensure price stability and strengthen central bank independence. Simultaneously, in the fiscal area, market development has allowed public debt managers to focus more on cost minimization. This "divorce" of

monetary and debt management functions in no way lessens the need for effective coordination of monetary and fiscal policy if overall economic performance is to be optimized and maintained in the long term. This paper analyzes these issues based on a review of the relevant literature and of country experiences from an institutional and operational perspective.

Lee, In Ho

PD August 1997. TI Interactive Contagion. AU Lee, In Ho; Valentinyi, Akos. AA University of Southampton. SR University of Southampton Discussion Papers in Economics and Econometrics: 9712; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.as.uk/discp.html. PG 17. PR on application. JE C71, C72, C73. KW Contagion. Game Theory. Coordination. Local Interaction.
AB In a local interaction game agents play an identical stage game against their neighbors over time. This paper obtains a general result on the long-run equilibrium distribution of the local interaction game whose stage game is the 2 x 2 coordination game. It is established that starting from a random initial configuration with a positive probability of playing the risk dominant strategy, a sufficiently large population coordinates on the risk dominant equilibrium with probability 1 for the nearest neighbor interaction. The authors' result improves previous ones including Blume (1995), Ellison (1995), and Morris (1997). It proves that there is an interactive contagion mechanism through which the risk dominant equilibrium may spread, in addition to the autonomous mechanism considered previously. Taking advantage of the mechanism the authors prove that for the nearest neighbor interaction, half dominance is sufficient for the degenerate long-run equilibrium distribution concentrated on the risk dominant strategy.

Lee, Jon

PD April 1997. TI Orienting Matroids Representable Over Both GF[3] and GF[5]. AA University of Kentucky. SR Universite Catholique de Louvain CORE Discussion Paper: 9725; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 6. PR $100 per year. JE C60. KW Matroids. Orientation.
AB For matroids representable over both GF[3] and GF[5], we provide a recipe for constructing an orientation.

TI Using Continuous Nonlinear Relaxations to Solve Constrained Maximum- Entrophy Sampling Problems. AU Anstreicher, Kurt M.; Fampa, Marcia; Lee, Jon; Williams, Joy.

Leith, J. Clark

PD January 1997. TI Botswana's International Trade Policies. AA University of Western Ontario. SR University of Western Ontario Department of Economics Research Reports: 9701; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.sscl.uwo.ca/economics. PG 25. PR $10.00 Canadian per paper. JE none available. KW Botswana. International Trade.
AB none available.

PD January 1997. TI Growth and Structural Transformation in Botswana. AA University of Western Ontario. SR University of Western Ontario Department of Economics Research Reports: 9702; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.sscl.uwo.ca/economics. PG 21. PR $10.00 Canadian per paper. JE none available. KW Growth. Structural Transformation. Botswana.
AB none available.

Lenseigne, Fabrice

TI French Public Finances: Modeling Long-Term Prospects and Reform Options. AU Habermeier, Karl F.; Lenseigne, Fabrice.

Lerner, Josh

PD April 1997. TI The Control of Strategic Alliances: An Empirical Analysis of Biotechnology Collaborations. AU Lerner, Josh; Merges, Robert P. AA Lerner: Harvard Business School and National Bureau of Economic Research. Merges: University of California, Berkeley. SR National Bureau of Economic Research Working Paper: 6014; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 31. PR $5.00. JE L14, L23, L65, O32, O34. KW Productivity. Strategic Alliances. Biotechnology. Contracts. Property Rights.
AB In this paper, we examine the determinants of control rights in technology strategic alliances between biotechnology firms and pharmaceutical corporations, as well as with other biotechnology firms. We undertake three clinical studies and an empirical analysis of 200 contracts. Consistent with the framework developed by Aghion and Tirole (1994), the allocation of control rights to the smaller party increases with its financial health. The empirical evidence regarding the relationship between control rights and the stage of the project at the time the contract is signed is less consistent with theoretical frameworks.

Lettau, Martin

PD January 1998. TI Idiosyncratic Risk and Volatility Bounds, or, Can Models With Idiosyncratic Risk Solve the Equity Premium Puzzle? AA CentER, Tilburg University and Humboldt University. SR Centre for Economic Policy Research Discussion Paper: 1795; 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 E44, G11, G12. KW Idiosyncratic Risk. Risk Premia. Volatility Bounds. Asset Prices.
AB This paper evaluates models with idiosyncratic consumption risk using Hansen and Jagannathan's (1991) volatility bounds. It is shown that idiosyncratic risk does not change the volatility bounds at all when consumers have constant relative risk aversion (CRRA) preferences and the distribution of the idiosyncratic shock is independent of the aggregate state. Following Mankiw (1986), I show that idiosyncratic risk can help to enter the bounds when idiosyncratic uncertainty depends on the aggregate state of the economy. Since individual consumption data is not reliable, I compute an upper bound of the volatility bounds using individual income data and assume that agents must consume their endowment. I find that the model does not pass the Hansen

and Jagannathan test even for very volatile idiosyncratic income data.

Levine, Paul

PD March 1998. TI Monetary Union: The Ins and Outs of Strategic Delegation. AU Levine, Paul; Pearlman, Joseph. AA Levine: University of Surrey. Pearlman: University of The South Bank and London Guildhall University. SR Centre for Economic Policy Research Discussion Paper: 1800; 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 E52, E58, E63, F33. KW Monetary Union. Central Banks. Independence. Delegation Game.
AB This paper addresses the conduct of monetary and fiscal policy in a closed trading bloc consisting of "ins" forming a monetary union and "outs" who retain monetary sovereignty. All governments can opt for a particular choice of institutional arrangement for their central bank (CB), however, and delegate monetary policy to it with varying degrees of independence or, equivalently, "conservatism". This paper examines the outcome when these decisions are individually rational for governments and are taken strategically, taking into account the intra-country interactions between fiscal authorities and their own central bank, and the inter-country interactions between the same players.

Levine, Phillip

TI Abortion Legalization and Child Living Circumstances: Who is the "Marginal Child?" AU Gruber, Jonathan; Levine, Phillip; Staiger, Douglas.

Levy, Joaquim

PD February 1998. TI Generational Accounting for France. AU Levy, Joaquim; Dore, Ousmane. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/14; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 50. PR not available. JE H22, H50, H60, J14. KW Government Expenditure. Tax Incidence. Budget. Elderly.
AB This paper presents the first set of generational accounts prepared for France, illustrating the impact on different generations of current policy settings. It was developed using age profiles of taxes and transfers drawn from a 1990 survey and recent demographic projections. The results reported suggest that if all living generations were protected from future policy changes, current policy rules would imply a net tax burden on future generations more than 1 1/2 times as large as that on current newborn generations. If the assumption that young living generations are protected is relaxed, a large net-tax imbalance in favor of "babyboomers" emerges.

Levy-Yeyati, Eduardo

TI Dollarization of Financial Intermediation: Causes and Policy Implications. AU Ize, Alain; Levy-Yeyati, Eduardo.

Lewbel, Arthur

PD July 1998. TI Nonparametric Censored Regression. AU Lewbel, Arthur; Linton, Oliver B. AA Lewbel: Brandeis University. Linton: Yale University. SR Yale Cowles Foundation Discussion Paper: 1186; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT

06520. PG 25. PR no charge up to 3 papers; $3.00 domestic; 4.00 International. JE C13, C14, C24. KW Average Derivatives. Censored Regression. Kernel. Nonparametric.
AB The nonparametric censored regression model is y = max[c,m(x) + e], where both the regression function m(x) and the distribution of the error e are unknown, but the fixed censoring point c is known. This paper provides a simple consistent estimator of the derivative of m(x) with respect to each element of x. The convergence rate of this estimator is the same as for the derivatives of an uncensored nonparametric regression. We then estimate the regression function itself by solving the associated partial differential equation system. We show that our estimator of m(x) achieves the same rate of convergence as the usual estimators in uncensored nonparametric regression. We also provide root n estimates of weighted average derivatives of m(x), which equal the coefficients in any linear or partly linear specification for m(x).

Liang, Chi-Yuan

TI Testing Endogenous Growth in South Korea and Taiwan. AU Feenstra, Robert C.; Madani, Dorsati; Yang, Tzu-Han; Liang, Chi-Yuan.

Libecap, Gary D.

PD 1997. TI Common Property. AA University of Arizona and National Bureau of Economic Research. SR University of Arizona Economics Discussion Paper: 97/08; Patricia Blassingame, Discussion Paper Coordinator, University of Arizona, Department of Economics, McClelland Hall, Room 401, P.O. Box 210108, Tucson, AZ 85721-0108. PG 23. PR $2.00 U.S. and Canada; $3.00 Overseas by air. JE D23, K11, O22, Q32. KW Common Property.
AB none available.

PD 1997. TI Unitization. AA University of Arizona and National Bureau of Economic Research. SR University of Arizona Economics Discussion Paper: 97/09; Patricia Blassingame, Discussion Paper Coordinator, University of Arizona, Department of Economics, McClelland Hall, Room 401, P.O. Box 210108, Tucson, AZ 85721-0108. PG 11. PR $2.00 U.S. and Canada; $3.00 Overseas by air. JE D23, I32, K11, L23, L71. KW Unitization.
AB none available.

TI Competing Claims to Land: The Sources of Violent Conflict in the Brazilian Amazon. AU Alston, Lee J.; Fuller, Jeffrey R.; Libecap, Gary D.; Mueller Bernardo.

TI Competing Claims to Land: The Sources of Violent Conflict in the Brazilian Amazon. AU Alston, Lee J.; Fuller, Jeffrey R.; Libecap, Gary D.; Mueller Bernardo.

TI The Legacy of New Deal Regulation: Why the AAA Succeeded, While the NRA Failed. AU Alexander, Barbara; Libecap, Gary D.

PD August 1997. TI The Structure and Contributions of Relational Contracts: Theory and Evidence from Oil and Gas Unit Operating Agreements. AU Libecap, Gary D.; Smith, James L. AA Libecap: University of Arizona and National Bureau of Economic Research. Smith: Southern Methodist University. SR University of Arizona Economics Discussion Paper: 97/07; Patricia Blassingame, Discussion Paper Coordinator, University of Arizona, Department of Economics, McClelland Hall, Room 401, P.O. Box 210108, Tucson, AZ

85721-0108. **PG** 42. **PR** $2.00 U.S. and Canada; $3.00 Overseas by air. **JE** D23, L23, L71. **KW** Relational Contracts. Unity Operating Agreements.
AB none available.

Lichtenberg, Frank R.

TI The Impact and Organization of Publicly-Funded Research and Development in the European Community. **AU** Feldman, Maryann P.; Lichtenberg, Frank R.

Lienert, Ian

PD December 1997. **TI** A Decade of Civil Service Reform in Sub-Saharan Africa. **AU** Lienert, Ian; Modi, Jitendra. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/179; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 47. **PR** not available. **JE** H50, J30, N30. **KW** Civil Service. Reform. Employment. Salaries.
AB This paper assesses a decade of experience in civil service reform in a sample of 32 sub-Saharan African countries. Many countries have made an important start towards reducing excessive staffing levels and the nominal wage bill, but less progress has been made in decompressing salary differentials in favor of higher-grade staff. In the CFA franc zone countries, real wages fell sharply after the 1994 devaluation, but the wage bill relative to tax revenue is still high in many countries. There is a need to consolidate quantitative first-generation reforms that contribute to macroeconomic stabilization. Equally important is the need to make progress on qualitative second-generation reforms, especially remuneration and promotion policies that reward performance and measures to improve civil service management. Such policies will require strong political commitment by governments.

Lim, Cheng Hoon

PD December 1997. **TI** An Econometric Analysis of the Determinants of Inflation in Turkey. **AU** Lim, Cheng Hoon; Papi, Laura. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/170; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 32. **PR** not available. **JE** E31, E50, E60. **KW** Inflation. Turkey.
AB High and variable inflation has been a central feature of the Turkish economy since the 1970's. This paper seeks to shed some light on the determinants of inflation in Turkey by analyzing price determination within the framework of a multi-sector macroeconomic model during 1970- 95. The main findings are that monetary variables (initially money, more recently the exchange rate) play a central role in the inflationary process, that public sector deficits contribute to inflationary pressures, and that inertial factors are quantitatively important. Policymakers' commitment to active exchange rate depreciation on several occasions in the past 15 years has also contributed to the inflationary process.

TI Preliminary Considerations of an Inflation Targeting Framework for the Philippines. **AU** Debelle, Guy; Lim, Cheng Hoon.

Lindbeck, Assar

PD December 1997. **TI** Intergenerational Risk Sharing, Stability and Optimality of Alternative Pension Systems.

AU Lindbeck, Assar; Hassler, John. **AA** Stockholm University. **SR** Centre for Economic Policy Research Discussion Paper: 1774; 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** H55, H62. **KW** Pension Systems. Pay-As-You-Go. Intergenerational.
AB In an analysis of the risk-sharing properties of different types of pension systems, we show that only fixed-fee pay-as-you-go (PAYG) pension systems can provide risk sharing for living individuals. Under some circumstances, however, other PAYG pension systems can enhance the expected welfare of all generations by reducing intergenerational income variability. The paper derives conditions for this to occur. It also analyzes the stability of actuarially fair PAYG pension systems. It is shown that if an actuarially fair pension with a non-balanced budget system is dynamically stable, its accumulated surpluses will converge to the same fund as in a fully funded system. The paper also shows that the welfare loss due to labor market distortions will, in fact, increase if the implicit marginal return in a compulsory system is raised above the average return.

PD March 1998. **TI** The Division of Labour Within Firms. **AU** Lindbeck, Assar; Snower, Dennis J. **AA** Lindbeck: University of Stockholm. Snower: Birkbeck College, London. **SR** Centre for Economic Policy Research Discussion Paper: 1825; 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** J23, J24, L23, M12, O33. **KW** Division of Labor. Specialization. Multi-Tasking. Work Organization. Technological Change.
AB The paper examines the determinants of the division of labor within firms. It provides an explanation of the pervasive change in work organization away from the traditional functional departments and towards multi-tasking and job rotation. Whereas the existing literature on the division of labor within firms emphasizes the returns from specialization and the need for coordination of the work of different workers, the present analysis focuses on the returns from multi-tasking, which is shown to arise from informational and technological complementarities among tasks as well as from the exploitation of the versatility of human capital.

Linton, Oliver B.

TI Nonparametric Censored Regression. **AU** Lewbel, Arthur; Linton, Oliver B.

Lipsey, Robert E.

PD May 1997. **TI** Wage Dispersion and Country Price Levels. **AU** Lipsey, Robert E.; Swedenborg, Birgitta. **AA** Lipsey: National Bureau of Economic Research. Swedenborg: Center for Business and Policy Studies (SNS). **SR** National Bureau of Economic Research Working Paper: 6039; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** $5.00. **JE** E24, E31, F31, F41, J31. **KW** International Finance. International Trade. Investment. Wage Dispersion. Price Level.
AB The purpose of this paper was to investigate whether there is a relationship between the degree of wage dispersion in a country and its price level relative to other countries, compared in a common currency. It was found that once a country's real per capita income and deviations of its exchange

rate from its trend value are allowed for, there is a pervasive relationship between wage dispersion and prices. Low wage dispersion, defined as a relatively small difference between the median wage and that of the lowest paid decile of workers, is associated with high price levels. The relationship applies more frequently to service prices than to goods prices, but where it does apply, the effects of wage dispersion are as large for goods as for services.

Lizal, Lubomir

PD November 1997. TI Enterprise Break-Ups and Performance During the Transition. AU Lizal, Lubomir; Singer, Miroslav; Svejnar, Jan. AA Lizal and Svejnar: CERGE-EI, Prague and University of Michigan Business School. Singer: CERGE-EI and Expandia Finance, Prague. SR Centre for Economic Policy Research Discussion Paper: 1757; 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 D21, D24, L11, L33, P11. KW Transition. Firms. Czechoslovakia. Spin-Offs. Breakups.

AB This paper estimates the effects of the 1991 breakups of Czechoslovak state-owned enterprises (SOE's) on subsequent performance of the master enterprises and the spin-off units. The analysis is based on quarterly and annual data of Czechoslovak industrial enterprises. The authors estimate the performance effect of a spin-off by comparing the performance of enterprises that were present throughout the 1990-92 period, but did not experience any spin-offs, to that of: a) master enterprises that experienced spin-offs; and b) the new spin-off subsidiaries. The estimates suggest that the breakups had a significant immediate (1991) effect on productive efficiency and profitability of industrial firms. The effect was positive for small to slightly above- average size spin-offs and negative for large ones. The hypothesis that the estimated effect of spin-offs on performance was identical for the spin-off subsidiaries and the master enterprises that experienced the spin-offs cannot be rejected.

Lizzeri, Alessandro

TI A Monopolistic Market for Certification. AU Albano, Gian Luigi; Lizzeri, Alessandro.

Lopez-Salido, J. David

TI Disinflation, Output and Unemployment: The Case of Spain. AU Andres, Javier; Hernando, Ignacio; Lopez-Salido, J. David.

TI A Switching Regime Model for the Spanish Inflation: 1962-1997. AU Ayuso, Juan; Kaminsky, Graciela L.; Lopez-Salido, J. David.

Lu, Maozu

PD February 1997. TI Mutual Encompassing and Model Equivalence. AU Lu, Maozu; Mizon, Grayham E. AA Lu: University of Southampton. Mizon: University of Southampton and European University Institute, Italy. SR University of Southampton Discussion Papers in Economics and Econometrics: 9702; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton SO17 1BJ, England. Website: www.soton.as.uk/discp.html. PG 14. PR on application. JE C10, C40, C51. KW Mutual Encompassing. Information Criterion. KLIC. Econometrics.

AB This paper analyzes the properties of mutual encompassing and its relationship to the KLIC equivalence between statistical models. It is shown that models are KLIC equivalent if and only if they are mutually encompassing and mutually Cox-encompassing and so mutual encompassing is necessary and sufficient for KLIC equivalence in this family. In addition, it is shown that mutual encompassing is transitive for models in the exponential family.

Ludema, Rodney D.

TI Economic Geography and the Fiscal Effects of Regional Integration. AU Wooton, Ian; Ludema, Rodney D.

Lutz, Stefan

PD January 1998. TI Strategic Quality Choice with Minimum Quality Standards. AU Lutz, Stefan; Lyon, Thomas P.; Maxwell, John W. AA Lutz: London School of Economics. Lyon and Maxwell: Indiana University. SR Centre for Economic Policy Research Discussion Paper: 1793; 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 L13, L15, L51, Q28. KW Product Differentiation. Quality. Environment. Regulation. Imperfect Markets.

AB In many markets governments set minimum quality standards while some sellers choose to compete on the basis of quality by exceeding them. Such 'high-quality' strategies often win public acclaim, especially when "environmental friendliness" is the dimension along which firms are differentiated. We analyze this phenomenon using a duopoly model of vertical product differentiation. A minimum quality standard leads both the high-quality and the low-quality firm to increase product qualities, lower prices, and increase quantities sold. As a result, total welfare increases. Industry profits fall, however, because reduced quality differentiation intensifies price competition. If the high-quality firm can commit to a quality level before regulations are promulgated, it induces the regulator to weaken its standards, and welfare falls.

Lye, Jenny N.

PD March 1998. TI Parametric Distributional Flexibility and Conditional Variance Models With an Application to Hourly Exchange Rates. AU Lye, Jenny N.; Martin, Vance L.; Teo, Leslie E. AA Lye and Martin: University of Melbourne, Australia. Teo: International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/29; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 39. PR not available. JE C10, C50, F31. KW ARCH. Student t. Modeling Variance. Exchange Rates.

AB This paper builds on the ARCH approach for modeling distributions with time-varying conditional variance by using the generalized Student t distribution. The distribution offers flexibility in modeling both leptokurtosis and asymmetry (characteristics seen in high-frequency financial time series data), nests the standard normal and Student t distributions, and is related to the Gram Charlier and mixture distributions. An empirical ARCH model based on this distribution is formulated and estimated using hourly exchange rate returns for four currencies. The generalized Student t is found to better model the empirical conditional and unconditional distributions than other distributional specifications.

Lyon, Thomas P.

TI Strategic Quality Choice with Minimum Quality Standards. AU Lutz, Stefan; Lyon, Thomas P.; Maxwell, John W.

Machado, J. A.

TI The Demand for Synthetic Fuels: Contingent Valuation of Quality- Differentiated Factors of Production. AU Braden, J. B.; Kolstad, C. D.; Woock, R. A.; Machado, J. A.

Macleod, W. Bentley

PD November 1997. TI Motivation and Markets. AU Macleod, W. Bentley; Malcomson, James M. AA Macleod: University of Southern California. Malcomson: University of Southampton. SR University of Southampton Discussion Papers in Economics and Econometrics: 9720; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton SO17 1BJ, England. Website: www.soton.as.uk/discp.html. PG 31. PR on application. JE D82, J23, J31, J41, O15. KW Efficiency Wages. Merit Pay. Migration. Motivation. Wage Differentials.
AB Many workers receive pay based on subjectively assessed performance, yet the shirking model of efficiency wages excludes it. This paper incorporates such pay, with the following results. Performance pay is more efficient than efficiency wages when the costs of having a job vacant are low and qualified workers in short supply. More capital- intensive industries pay more than less capital-intensive industries, as observed in studies of interindustry wage differentials. Sustaining an efficient outcome requires a social convention similar to the notion of a fair wage. The model also makes predictions about the relationship between turnover, wages, growth and unemployment.

Madani, Dorsati

TI Testing Endogenous Growth in South Korea and Taiwan. AU Feenstra, Robert C.; Madani, Dorsati; Yang, Tzu-Han; Liang, Chi-Yuan.

Maggi, Giovanni

TI Free Trade Versus Strategic Trade: A Peek into Pandora's Box. AU Grossman, Gene M.; Maggi, Giovanni.

Mailath, George J.

TI Efficient Non-Contractible Investments. AU Cole, Harold L.; Mailath, George J.; Postlewaite, Andrew.

Malcomson, James M.

PD March 1997. TI Contracts, Hold-Up, and Labor Markets. AA University of Southampton. SR University of Southampton Discussion Papers in Economics and Econometrics: 9703; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton SO17 1BJ, England. Website: www.soton.as.uk/discp.html. PG 54. PR on application. JE D82, J41, K31. KW Contracts. Investments. Wages. Employment.
AB The implications for labor markets of contracts to avoid hold-up of investments are assessed. Employment at will protects the returns on a firm's general and specific investments without wages increasing with tenure. With turnover costs, fixed but renegotiable wages can protect general investments by both firm and employee, and generate wage stickiness without adversely affecting employment. Employment contracts that induce efficient specific investments by both firm and employee are problematic so it makes sense, wherever possible, for one side to make all such investments. With private information, fixed wages may induce fewer inefficient separations than employment at will.

TI Motivation and Markets. AU Macleod, W. Bentley; Malcomson, James M.

PD April 1998. TI Individual Employment Contracts. AA University of Southampton. SR· University of Southampton Discussion Papers in Economics and Econometrics: 9804; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton SO17 1BJ, England. Website: www.soton.as.uk/discp.html. PG 78. PR on application. JE J23, J41, J53. KW Contracts. Employment. Enforcement. Renegotiation.
AB This chapter reviews recent developments in the study of individual employment contracts. It discusses three reasons for an employer and an employee to have a contract: (1) to allocate risk in a way different from a spot market; (2) to enhance the efficiency of investment decisions by protecting the return on investments made by one party from being captured by the other; and (3) to motivate the employee by making compensation depend on performance. The main emphasis is on issues that arise from the problems of enforcing contracts in practice and from renegotiation by mutual agreement.

Mammen, Enno

TI On Estimation of Monotone and Concave Frontier Functions. AU Gijbels, Irene; Mammen, Enno; Park, Byeong U.; Simar, Leopold.

Manzano, M. Cruz

PD August 1998. TI Indicadores de Expectativas Sobre los Tipos de Interes A Corto Plazo: La Informacion Contenida en el Mercado de Opciones. AU Manzano, M. Cruz; Sanchez, Isabel. AA Banco de Espana. SR Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9816; Banco de Espana., Seccion de Publicaciones, Negociado de Distribucion y Gestion. Alcala 50, 28104 Madrid, Spain. Website: www.bde.es. PG 35. PR Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. JE C14, E43, E44, G13. KW Interest Rates. Expectations. Options. Density Functions. Probability Distributions.
AB Usual expected interest rate indicators -- forward rates obtained from the zero coupon curve of futures market rates -- only approximate the average expected value of rates which agents forecast for the future. Such expected values hide the probability distribution that agents allocate to the possible values of interest rates at a certain term and in a certain horizon. The estimation of the expected rate probability function provides indicators that help to evaluate the impact of monetary and financial shocks. This estimation is possible by using the information gathered in interest rate options markets. In this document the expected three month interbank interest rate distribution function is estimated, from data of call options on MIBOR-90 futures, using a non-parametric method. The time evolution of this distribution function allows to evaluate the effects of the Bank of Spain intervention rate movements on the distribution of agents' expectations of short-term interest rates.

Maravall, Agustin
TI   Guide for Using the Programs TRAMO and SEATS.
AU   Gomez, Victor; Maravall, Agustin.

TI   Automatic Modeling Methods for Univariate Series.
AU   Gomez, Victor; Maravall, Agustin.

TI   Seasonal Adjustment and Signal Extraction in Economic Time Series. AU   Gomez, Victor; Maravall, Agustin.

Marchand, Hugues
PD   March 1997. TI   The 0-1 Knapsack Problem With a Single Continuous Variable. AU   Marchand, Hugues; Wolsey, Laurence A. AA   Marchand: New York University. Wolsey: Universite Catholique de Louvain. SR   Universite Catholique de Louvain CORE Discussion Paper: 9720; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 20. PR $100 per year. JE   C40, C60, D10. KW   Knapsack   Problem.   Mixed   Constraints.   Lifting   Projection. Inequalities.
AB   Constraints arising in practice often contain many 0-1 variables and one or a small number of continuous variables. Existing knapsack separation routines cannot be used on such constraints. This paper studies such constraint sets, and derives valid inequalities that can be used as cuts for such sets, as well for more general mixed 0-1 constraints. Specifically the authors investigate the polyhedral structure of the knapsack problem with a single continuous variable, called the continuous 0-1 knapsack problem. First different classes of facet-defining inequalities are derived based on projection and lifting. The order of lifting plays an important role. Secondly the authors show that the flow cover inequalities derived for the single node flow set can be obtained from valid inequalities for the continuous 0-1 knapsack problem. Thus the separation heuristic they derive for continuous knapsack sets can also be used to derive cuts for more general mixed 0-1 constraints.

Marchand, Maurice
TI   Tax Competition and Revelation of Preferences for Public Expenditure. AU   Bucovetsky, Sam; Marchand, Maurice; Pestieau, Pierre.

Marimon, Ramon
PD   May 1997. TI   Unemployment vs. Mismatch of Talents: Reconsidering   Unemployment   Benefits. AU   Marimon, Ramon; Zilibotti, Fabrizio. AA   Marimon: European University Institute and National Bureau of Economic Research. Zilibotti: Universitat Pompeu Fabra, Spain. SR   National Bureau of Economic Research Working Paper: 6038; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 43. PR $5.00. JE   D33, J24, J41, J64, J65. KW   Economic Fluctuations. Growth. Employment. Unemployment Insurance. Matching.
AB   The authors develop an equilibrium search-matching model with risk- neutral agents and two-sided ex-ante heterogeneity. Unemployment insurance has the standard effect of reducing employment, but also helps workers to get a suitable job. The predictions of a simple model are consistent with the contrasting performance of the labor market in Europe and the U.S. in terms of unemployment, productivity growth and wage inequality. Too show this, the authors construct two

fictitious economies with calibrated parameters which only differ by the degree of unemployment insurance and assume that they are hit by a common technological shock which enhances the importance of mismatch. This shock reduces the proportion of jobs which workers regard as acceptable in the economy with unemployment insurance (Europe). As a result, unemployment doubles in this economy. In the laissez-faire economy (U.S.), unemployment remains constant, but wage inequality increases more and productivity grows less due to larger mismatch.

PD   December 1997. TI   Unemployment Versus Mismatch of   Talents: Reconsidering   Unemployment   Benefits. AU   Marimon, Ramon; Zilibotti, Fabrizio. AA   Marimon: European University Institute. Zilibotti: Universitat Pompeu Fabra and Stockholm University. SR   Centre for Economic Policy Research Discussion Paper: 1769; 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   D33, J23, J24, J64, J65. KW   Unemployment.   Productivity.   Mismatch.   Ex-Ante Heterogeneity. Search.
AB   See abstract for Marimon, Ramon and Fabrizio Zilibotti. May   1997,   Unemployment   vs.   Mismatch   of   Talents: Reconsidering Unemployment Benefits". National Bureau of Economic Research Working Paper: 6038; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org.

Marmol, Francesc
TI   The Correlogram of a Long Memory Process Plus a Simple Noise. AU   Granger, Clive W. J.; Marmol, Francesc.

Marsiliani, Laura
PD   December 1997. TI   Imperfect Competition, Labour Market Distortions and the Double Dividend Hypothesis. AU   Marsiliani,   Laura;   Renstrom,   Thomas   I. AA   Marsiliani: London   Business   School.   Renstrom: University of Birmingham. SR   University of Birmingham, Department   of   Economics   Discussion   Paper: 97/26; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United   Kingdom.   Website: www.bham.ac.uk/economics. PG   47. PR   2 pounds; no charge to academics. JE   D43, D62, E62, H23, J51. KW   Double Dividend. Environmental Taxation. Imperfect Competition. Wage Bargaining.
AB   The paper explores the hypothesis of a double dividend from environmental taxation. It is argued that an environmental tax reform, i.e. shifting the burden of taxation away from labor toward the environment can improve environmental quality, boost employment and increase welfare. The paper presents a general equilibrium model of a closed economy. A theoretical analysis is conducted in a second best world, where the economy is distorted by labor taxes. Moreover, other distortions are present: firms are imperfectly competitive and the labor market is characterized by wage bargaining between unions and firms. The authors find that employment and welfare always increase when the revenue from an increase in the energy tax is fully recycled to cut the rate of the pre-existent labor tax. It turns out that the exact nature of the distortions are of crucial importance in assessing the magnitude of the employment effect of an environmental tax reform.

Martin, Philippe

TI   Global Income Divergence, Trade and Industrialization: The Geography of Growth Take-Offs. AU   Baldwin, Richard E.; Martin, Philippe; Ottaviano, Gianmarco I.

Martin, Vance L.

TI   Parametric Distributional Flexibility and Conditional Variance Models With an Application to Hourly Exchange Rates. AU   Lye, Jenny N.; Martin, Vance L.; Teo, Leslie E.

Martinez-Zarzoso, Inmaculada

PD   June 1997. TI   Quality of Exports and Taste Bias: A New Approach. AU   Martinez-Zarzoso, Inmaculada; Sinclair, P. J. N. AA   University of Birmingham. SR   University of Birmingham, Department of Economics Discussion Paper: 97/09; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. Website: www.bham.ac.uk/economics. PG   26. PR   2 pounds; no charge to academics. JE   F14, F41. KW   Consumers. Demand. Exports. Quality. Tastes.

AB   This paper studies the determinants of the demand for exports in different markets. A model is set up to show how the relative demand for exports of a product variety increases when its relative quality rises and when the taste for this variety is more pronounced. The model is then tested empirically for Spanish manufacturing exports to the European Union. The results show a preference bias towards a country with higher relative product quality.

Martini, Gian Maria

PD   May 1997. TI   Antitrust Policy and Price Collusion: Public Agencies Versus Delegation? AU   Martini, Gian Maria; Rovesti, Cinzia. AA   Martini: University of Milan, Italy. Rovesti: Universite Catholique de Louvain, and Italian Antitrust Authority, Italy. SR   Universite Catholique de Louvain CORE Discussion Paper: 9736; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG   48. PR $100 per year. JE   D43, D82, L13, L40. KW   Cartels. Prices. Antitrust. Social Welfare. Asymmetric Information.

AB   In a simple economic setting with asymmetric information the authors compare different social institutions which fight against industry cartels on prices. Firstly, they analyze the case where an Antitrust Authority is created and they distinguish two situations depending whether the agency has the possibility to commit itself to a policy or not. Secondly, the authors develop an alternative framework in which consumers can act legally against price collusion practices. Then, they compare the results in terms of social welfare associated to the three schemes. Even if a general result in favor to a "delegated" antitrust action to consumers cannot be established, the authors show that in many instances private suits can be more effective than interventions of an Antitrust Authority.

Matzkin, Rosa L.

TI   Estimation of Nonparametric Functions in Simultaneous Equations Models, with an Application to Consumer Demand. AU   Brown, Donald J.; Matzkin, Rosa L.

Maxwell, John W.

TI   Strategic Quality Choice with Minimum Quality Standards. AU   Lutz, Stefan; Lyon, Thomas P.; Maxwell, John W.

McCallum, Bennett T.

PD   April 1997. TI   Issues in the Design of Monetary Policy Rules. AA   Carnegie Mellon University and National Bureau of Economic Research. SR   National Bureau of Economic Research Working Paper: 6016; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG   71. PR $5.00. JE   E52, E58, E63. KW   Economic Fluctuations. Growth. Monetary Policy. Central Banks.

AB   Topics covered in this survey paper include the following: distinguishing rules from discretion in practice; the feasibility of rule-like behavior by an independent central bank; optimal control vs. robustness as research strategies; choice among target variables; growth-rate vs. growing-level target paths; feasibility of interest rate and monetary base instruments; nominal indeterminacy as distinct from solution multiplicity; root-mean-square performance measures with interest rate and monetary base instruments; operationality of rule specifications; stochastic vs. counterfactual historical simulation procedures; interactions between monetary and fiscal policies; and the fiscal theory of the price level.

McClellan, Mark

PD   April 1997. TI   The Incidence of Medicare. AU   McClellan, Mark; Skinner, Jonathan. AA   McClellan: Stanford University and National Bureau of Economic Research. Skinner: Dartmouth College and National Bureau of Economic Research. SR   National Bureau of Economic Research Working Paper: 6013; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG   58. PR $5.00. JE   H22, H23, H51, I11, I18. KW   Elderly. Health Care. Public Economics. Medicare. Transfers.

AB   The Medicare program transfers more than $200 billion annually from taxpayers to beneficiaries. This paper considers the incidence of such transfers. First, the authors examine the net tax payments and program expenditures for individuals in different lifetime income groups. They find Medicare has led to net transfers from the poor to the wealthy, as a result of relatively regressive financing mechanisms and the higher expenditures and longer survival times of wealthier beneficiaries. Even with recent financing reforms, net transfers to the wealthy are likely to continue for at least several more decades. Second, the authors consider the insurance value of Medicare in providing a missing market for health insurance. With plausible parameter values, their simulations suggest that low-income elderly benefited more than the dollar flows would suggest. Including this insurance value implies that, on net, there is faint redistribution from the highest income deciles to the lowest income deciles.

McDaniel, Tanga

TI   Competition in Electricity Supply: Will '1998' be Worth it? AU   Green, Richard; McDaniel, Tanga.

McGrattan, Ellen R.

PD   June 1997. TI   Application of Weighted Residual Methods to Dynamic Economic Models. AA   Federal Reserve Bank of Minneapolis. SR   Federal Reserve Bank of Minneapolis Staff Report: 232; Research Department, Federal

Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. **PG** 31. **PR** no charge. **JE** C63, C68. **KW** Weighted Residual Methods. Finite Element Method. Growth Model.
AB none available.

PD May 1998. **TI** Comments on Gordon, Leeper, and Zha's "Trends in Velocity and Policy Expectations". **AA** Federal Reserve Bank of Minneapolis. **SR** Federal Reserve Bank of Minneapolis Staff Report: 247; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. **PG** 15. **PR** no charge. **JE** E41. **KW** Money Demand. Velocity. Interest Rates.
AB I argue that low-frequency movements in U.S. base velocity are well explained by standard models of money demand. The model of Gordon, Leeper, and Zha is not standard because they assume a very high interest elasticity. The positive conclusion that they reach about the model's ability to mimic movements in velocity necessarily implies that predicted movements in interest rates are too smooth.

PD July 1998. **TI** Explaining Cross-Country Income Differences. **AU** McGrattan, Ellen R.; Schmitz, James A., Jr.. **AA** Federal Reserve Bank of Minneapolis. **SR** Federal Reserve Bank of Minneapolis Staff Report: 250; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. **PG** 72. **PR** no charge. **JE** E62, E65, O11, O41, O47. **KW** Cross-Country GDP. Growth. Development. Growth Models. Growth Accounting.
AB This chapter reviews the literature that tries to explain the disparity and variation of GDP per worker and GDP per capita across countries and across time. There are many potential explanations for the different patterns of development across countries, including differences in luck, raw materials, geography, preferences, and economic policies. We focus on differences in economic policies and ask to what extent can differences in policies across countries account for the observed variability in income levels and their growth rates. We review estimates for a wide range of policy variables. In many cases, the magnitude of the estimates is under debate. Estimates found by running cross-sectional growth regressions are sensitive to which variables are included as explanatory variables. Estimates found using quantitative theory depend in critical ways on values of parameters and measures of factor inputs for which there is little consensus. In this chapter, we review the ongoing debates of the literature and the progress that has been made thus far.

McGuire, Martin C.
PD March 1998. **TI** The Security Factor in the Political Economy of Development. **AA** University of California, Irvine and International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/98/33; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 41. **PR** not available. **JE** D72, D74, H11, H56. **KW** Security. Economic Conflict. Wealth Distribution. Governance.
AB A country's judiciary, police, and security forces are essential to protect the State from external aggression. By virtue of the State's monopoly of coercion, they maintain a stable legal framework and the safety of persons and property.

All these activities enhance a society's productivity, but they also sustain the particular political regime -- and its redistributive ethic -- in power. They absorb resources, but they also waste them, since security forces tend to be rent-seekers. This paper analyzes both the productive and the unproductive side of security provision and shows that the balance depends on the nature of the political regime.

Medrano, Luis Angel
TI Strategic Behaviour and Price Discovery. **AU** Vives, Xavier; Medrano, Luis Angel.

Merges, Robert P.
TI The Control of Strategic Alliances: An Empirical Analysis of Biotechnology Collaborations. **AU** Lerner, Josh; Merges, Robert P.

Meschi, Meloria
TI Product Market Integration and Wages: Evidence From a Cross-Section of Manufacturing Establishments in the United Kingdom. **AU** Driffill, John; Ulph, Alistair; Meschi, Meloria.

Mestre, Ricardo
TI Monetary Policy and Exchange Rate Dynamics in the Spanish Economy. **AU** Andres, Javier; Mestre, Ricardo; Valles, Javier.

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

Michel, Philippe
TI Intertemporal Equity and the Extension of the Ramsey Criterion. **AU** Fleurbaey, Marc; Michel, Philippe.

TI Intergenerational Altruism and the Environment. **AU** Jouvet, Pierre-Andre; Michel, Philippe; Vidal, Jean-Pierre.

Miles, David
PD December 1997. **TI** Modelling the Impact of Demographic Change Upon the Economy. **AA** Imperial College. **SR** Centre for Economic Policy Research Discussion Paper: 1762; 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** D58, D91, E21, J11. **KW** Demographics. Saving. Pensions. Overlapping Generations. Aging.
AB It is well known that over the next few decades there will be significant changes in the demographic structures of nearly all developed countries; by the middle of the next century the ratio of people of working age to those of retirement age will, in many countries, be only around one-half the current level. Such dramatic demographic change could have a powerful impact upon saving behavior in both the public and private sectors and upon asset prices and wages. This paper argues that simulations based on calibrated general equilibrium models are likely to provide the most reliable evidence. A model is developed and used to assess how aging will affect the United Kingdom and the rest of Europe. How governments respond to shifts in saving and in the burden of state pensions is important and the model is used to assess various public policy options.

Milesi-Ferretti, Gian Maria

PD December 1997. **TI** Sharp Reductions in Current Account Deficits: An Empirical Analysis. **AU** Milesi-Ferretti, Gian Maria; Razin, Assaf. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/168; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 17. **PR** not available. **JE** F32, F34. **KW** Current Account Deficits. Current Account Sustainability. Capital Flows.

AB The paper studies determinants and consequences of sharp reductions in current account imbalances (reversals) in low- and middle-income countries. It poses two questions: what triggers reversals, and what factors explain how costly reversals are? It finds that both domestic variables, such as the current account balance, openness to trade, and the level of reserves, and external variables, such as terms of trade shocks, U.S. real interest rates, and growth in industrial countries, seem to play important roles in explaining reversals in current account imbalances. It also finds some evidence that countries with a less appreciated real exchange rate, higher investment, and more openness before the reversal tend to grow faster after a reversal occurs.

Miller, Marcus H.

PD February 1998. **TI** Sovereign Liquidity Crises: The Strategic Case for a Payments Standstill. **AU** Miller, Marcus H.; Zhang, Lei. **AA** University of Warwick. **SR** Centre for Economic Policy Research Discussion Paper: 1820; 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** D82, F34, G12, H63. **KW** Sovereign Borrowing. Liquidity Crises. Moral Hazard. Time Consistency. International Institutions.

AB Is sovereign debt so different from corporate debt that there is no need for bankruptcy procedures to handle potential defaults? The basic tools of finance seem to confirm that, without water-tight sovereign immunity, creditors face a Prisoner's Dilemma: litiginous creditors may be tempted to grab what sovereign assets they can in a 'race of the vultures'. Recent case history also suggests that there may be gains to "learning by suing". To check this by a standstill on payments would doubtless run some risk of debtor's moral hazard, as the Institute for International Finance have warned in their report on crisis resolution. But not to have an orderly procedure may mean that the IMF is de facto forced to bail out distressed members, leading to the risk of investors' moral hazard, where investors lend without monitoring (secure in the belief that the international agencies will have to intervene).

Miller, Richard D., Jr.

TI The Productivity of Health Care and Pharmaceuticals: An International Comparison. **AU** Frech, H. E., III.; Miller, Richard D., Jr..

Mitchell, Janet

PD January 1998. **TI** Strategic Creditor Passivity, Regulation and Bank Bailouts. **AA** ECARE, Belgium. **SR** Centre for Economic Policy Research Discussion Paper: 1780; 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** G21, G28, G33, P50. **KW** Bankruptcy. Banking. Prudential Regulation. Transition. Loans.

AB This paper analyzes two aspects of banking crises: the choices that banks make to passively roll over loans in default versus actively pursuing their claims; and choices by regulators to "punish" passive and insolvent banks versus rescuing them. Banks may choose to roll over loans in order to hide their poor financial conditions or to gamble for resurrection. Regulators can reduce creditor passivity through their ex- ante choice of monitoring capability and their ex-post choice of policy for distressed banks. Yet, if too many banks are discovered to be passive or insolvent, a situation labeled "too-many-to-fail" (TMTF) may arise, whereby it is less costly to rescue than to close large numbers of banks. Banks may implicitly collude through their choice of actions in order to trigger TMTF. A principal result of the analysis is that when the regulator reacts to the threat of banks triggering TMTF, it is by "softening.".

Mitchell, Olivia S.

TI Social Security Money's Worth. **AU** Zeldes, Stephen P.; Geanakoplos, John; Mitchell, Olivia S.

TI Would a Privatized Social Security System Really Pay a Higher Rate of Return? **AU** Geanakoplos, John; Mitchell, Olivia S.; Zeldes, Stephen P.

Mizon, Grayham E.

TI Mutual Encompassing and Model Equivalence. **AU** Lu, Maozu; Mizon, Grayham E.

Moauro, Filippo

PD December 1997. **TI** Modelling a Change of Classification in Economic Time Series Data. **AA** University of Southampton and ISTAT. **SR** University of Southampton Discussion Papers in Economics and Econometrics: 9721; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton SO17 1BJ, England. Website: www.soton.as.uk/discp.html. **PG** 27. **PR** on application. **JE** C32, C51, C53, C81. **KW** Classification Standards. Time Series. Conversion Matrix. State Space. Time Varying Constraints.

AB The change of classification problem for economic sectoral time series data is examined by a conversion matrix approach. State space representations are proposed both for data reconstruction and modeling a change of classification. The Doran (1992) methodology of constraining the Kalman filter to satisfy time varying restrictions is applied to show how to handle both limited information and aggregation constraints. The authors explore the implications of this approach for what will be, perhaps, the most important change of classification in sectoral data: the new National Accounts for European Unification. Results of an experimental application to Italian Quarterly Accounts are provided.

Modi, Jitendra

TI A Decade of Civil Service Reform in Sub-Saharan Africa. **AU** Lienert, Ian; Modi, Jitendra.

Moghadam, Reza

TI The Nonmonetary Determinants of Inflation: A Panel Data Study. **AU** Cottarelli, Carlo; Griffiths, Mark; Moghadam, Reza.

Mongardini, Joannes

PD January 1998. **TI** Estimating Egypt's Equilibrium Real Exchange Rate. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/98/05; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 41. **PR** not available. **JE** F31, F34. **KW** Equilibrium Real Exchange Rate. External Competitiveness.

AB In light of the real appreciation of the Egyptian pound over the last six years and Egypt's lackluster export growth, questions of external competitiveness and exchange rate policy have arisen. This paper sheds light on these issues by estimating empirically Egypt's equilibrium real exchange rate, that is, the rate that is consistent with fundamentals. The results show that, while the real exchange rate was substantially overvalued before 1993, today it is only moderately above the equilibrium rate. Moreover, the analysis shows that the recent appreciation of the pound does not indicate a worsening misalignment.

Monteagudo, Josefina

TI The Augmented Solow Model and the Productivity Slowdown. **AU** Hamilton, James D.; Monteagudo, Josefina.

Moon, Hyungsik

TI How to Estimate Autoregressive Roots Near Unity. **AU** Phillips, Peter C. B.; Moon, Hyungsik; Xiao, Zhijie.

Mora, Jose V. Rodriguez

TI IQ, Social Mobility and Growth. **AU** Hassler, John; Mora, Jose V. Rodriguez.

Morales, R. Armando

PD January 1998. **TI** Exchange Rate Uncertainty in Money-Based Stabilization Programs. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/98/03; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 18. **PR** not available. **JE** E44, F31. **KW** Exchange Rate Uncertainty. Stabilization Programs.

AB Complementing the explanation provided by Calvo and Vegh (1994) for money-based stabilization programs, exchange rate uncertainty introduced to a particular version of the portfolio approach with imperfect competition in the banking system leads to a bias toward appreciation that is directly related to the divergence of expectations and that dampens the interaction between portfolio movements and the real exchange rate. Based on Frankel-Froot, uncertainty exists when the fundamental equilibrium real exchange rate is temporarily unknown in a foreign exchange market with two types of agents: "parity-guessers," who expect a jump to a reference parity level, and "money-followers," who expect nominal depreciation equal to the monetary rule.

Morelli, Massimo

TI Moral Hazard and Overlapping Generations With Endogenous Occupational Choice. **AU** Ghatak, Maithreesh; Morelli, Massimo; Sjostrom, Tomas.

PD April 1997. **TI** Coalition Formation and Payoff Distribution in Majority Games. **AA** Universite Catholique de Louvain and Iowa State University. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9735; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 31. **PR** $100 per year. **JE** C71, C72, D71, D72. **KW** Coalition Formation. Cooperation. Majority Games. Game Theory.

AB This paper provides a cooperative solution as well as a non-cooperative analysis to study coalition formation and payoff distribution in weighted majority games. The cooperative solution concept proposed, the Anonymous Core, keeps the spirit of Core-like competition, but it is non-empty and it is precisely characterized for every vector of weights. Agents of the same type must receive equal treatment within the winning coalitions, and some consistency is required on blocking coalitions, following a similar logic to that underlying Von-Neumann and Morgenstern's Stable Set. The authors show that in any weighted majority game every agent within the winning coalition is expected to obtain a payoff share proportional to her bargaining power. They introduce a non-cooperative coalitional bargaining game which resembles the rules of the game describing the formation of coalitional governments. For this game the authors obtain an algorithm for the computation of all the Symmetric Markov Subgame Perfect Equilibria.

Moreno, Diego

PD May 1997. **TI** An Experimental Study of Communication and Coordination in Noncooperative Games. **AU** Moreno, Diego; Wooders, John C. **AA** Moreno: Universidad Carlos III de Madrid. Wooders: University of Arizona. **SR** University of Arizona Economics Discussion Paper: 97/10; Patricia Blassingame, Discussion Paper Coordinator, University of Arizona, Department of Economics, McClelland Hall, Room 401, P.O. Box 210108, Tucson, AZ 85721-0108. **PG** 29. **PR** $2.00 U.S. and Canada; $3.00 Overseas by air. **JE** C71, C72, C92. **KW** Correlation. Coalition-Proof. Equilibrium. Communication. Experiment.

AB This paper reports the results of an experiment designed to test the usefulness of alternative solution concepts to explain players' behavior in noncooperative games with preplay communication. In the experiment subjects communicate by plain conversation prior to playing a simple game. In this setting, we find that the presumption of individualistic and independent behavior underlying the concept of Nash equilibrium is inappropriate. Instead, we observe behavior to be coordinated and correlated. Statistical tests reject Nash equilibrium as an explanation of observed play. The coalition proof correlated equilibrium of the game, however, explains the data when the possibility of errors by players is introduced.

Morris, Stephen

TI Finance Applications of Game Theory. **AU** Allen, Franklin; Morris, Stephen.

Moscarini, Giuseppe

PD April 1998. **TI** Wald Revisited: The Optimal Level of Experimentation. **AU** Moscarini, Giuseppe; Smith, Lones. **AA** Moscarini: Yale University. Smith: Massachusetts Institute of Technology. **SR** Yale Cowles Foundation Discussion Paper: 1176; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 36. **PR** no charge up to 3 papers; $3.00 domestic; 4.00 International. **JE** C11, C12, C44, C61, D81, D83.

KW Learning. Experimentation. Sequential Analysis. R&D.
AB The paper revisits Wald's (1947) sequential experimentation paradigm, now assuming that an impatient decision maker can run variable-size experiments each period at some increasing and strictly convex cost before finally choosing an irreversible action. We translate this natural discrete time experimentation story into a tractable control of variance for a continuous time diffusion. Here we robustly characterize the optimal experimentation level: It is rising in the confidence about the project outcome, and for not very convex cost functions, the random process of experimentation levels has a positive drift over time. We also explore several parametric shifts unique to our framework. Among them, we discover what is arguably an "anti-folk" result: Where the experimentation level is positive, it is often higher for a more impatient decision maker. This paper more generally suggests that a long-sought economic paradigm that delivers a sensible law of demand for information is our dynamic one -- namely, allowing the decision maker an eternal repurchase (resample) option.

Mountford, Andrew
PD July 1997. **TI** Catching Up, Overtaking and the Growth Implications of Economies with Land. **AA** University of Southampton. **SR** University of Southampton Discussion Papers in Economics and Econometrics: 9711; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.as.uk/discp.html. **PG** 32. **PR** on application. **JE** F21, F43, H24, O41, O47. **KW** Convergence. Capital Mobility. Overlapping Generations. Dynamic Taxation. Growth.
AB This paper analyzes the global dynamics of a convex overlapping generations model with land and analyzes the implications of international capital mobility in this model. It shows that this model can explain some of the stylized facts of the growth literature which cannot be explained by the standard two factor models and also provides interesting insights into land taxation. Specifically, it is shown how international capital mobility can allow one economy to catch up and overtake the steady state GDP and GNP per capita of another economy, how a small (marginal) increase in the land taxation rate may cause a large (non-marginal) increase in the steady state level of income, and how there could be a gradual convergence of per capita GDP across countries in a world with perfect international trade and capital mobility. Finally it is also shown how this model can be extended as an endogenous growth model.

Mourmouras, Iannis A.
PD October 1997. **TI** Fiscal Policies and the Terms of Trade in an Endogenous Growth Model with Overlapping Generations. **AU** Mourmouras, Iannis A.; Ghosh, Sugata. **AA** Mourmouras: University of Southampton. Ghosh: Cardiff Business School. **SR** University of Southampton Discussion Papers in Economics and Econometrics: 9719; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.as.uk/discp.html. **PG** 30. **PR** on application. **JE** E62, F43, H54, O41. **KW** Uncertain Lifetimes. Fiscal Policy. Terms of Trade. Growth. Non Neutralities.
AB This paper investigates how changes in fiscal policy can affect relative prices, optimal savings and steady state utility in a two- country, overlapping generations model of endogenous growth. The authors develop a simple model that combines Blanchard-type consumers with uncertain lifetimes, with an endogenous growth model in which there are production externalities from the capital stock of other firms. The basic insight is to highlight a potentially interesting link between fiscal policy and the terms of trade. A permanent rise in one country's share of government consumption to GDP results in an improvement in its terms of trade, a fall in its share of private consumption to GDP and a lower growth rate. A steady-state rise in the public debt to GDP ratio results in an increase in the share of consumption to GDP, a higher demand for the foreign good and a lower growth rate.

Mukerji, Sujoy
PD September 1997. **TI** Ambiguity Aversion and Incompleteness of Contractual Form. **AA** University of Southampton. **SR** University of Southampton Discussion Papers in Economics and Econometrics: 9715; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.as.uk/discp.html. **PG** 34. **PR** on application. **JE** D23, D81, D84, L14. **KW** Knightian Uncertainty. Ambiguity. Expected Utility. Incomplete Contracts. Investment Hold-Up.
AB Subjective uncertainty is characterized by ambiguity if the decision maker has an imprecise knowledge of the probabilities of payoff relevant events. In such an instance, the decision maker's beliefs are better represented by a set of probability functions than by a unique probability function. An ambiguity averse decision maker adjusts his choice on the side of caution in response to his imprecise knowledge of the odds. The non-additive expected utility model allows a formal characterization of such behavior. Using this model, this paper shows that ambiguity aversion can explain the existence of incomplete contracts. The setting for the demonstration is the investment hold-up model which has been the focus of much of the recent research on the implications of incomplete contracts.

Mullin, Charles
PD May 1997. **TI** The Future of Old-Age Longevity: Competitive Pricing of Mortality Contingent Claims. **AU** Mullin, Charles; Philipson, Tomas. **AA** Mullin: University of Chicago. Philipson: University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6042; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** $5.00. **JE** H51, H55, I12, I18, J14. **KW** Elderly. Health Care. Longevity. Contingent Claims. Mortality.
AB The future course of old-age mortality is of great importance to public sector expenditures in countries where old-age programs, such as Social Security and Medicare in the U.S., account for large fractions of the public budget. This paper argues that the competitive market prices of mortality contingent claims, such as annuities and life insurance, contain information which allow one to infer the opinion of the market regarding the pace of the continued increase in old-age longevity. The paper develops methods to identify and estimate the mortality implicit in the market prices of such claims. Utilizing these methods, the authors provide estimates using cohort-specific prices of U.S. term life insurance contracts in 1990-96 for individuals aged 60 in each calendar year. Their

main finding is that the mortality patterns inferred from these prices indicate a continued decline in cohort-specific mortality at rates equal to or greater than recent historical trends.

Mullin, Wallace P.
TI   Predation and Its Rate of Return: The Sugar Industry, 1887-1914. AU   Genesove, David; Mullin, Wallace P.

Munoz, Emilio
TI   The Controllability of a Monetary Aggregate in EMU. AU   Cabrero, Alberto; Escriva, Jose Luis; Munoz, Emilio; Penalosa, Juan.

Nagy, Anca Monika
PD   November 1997. TI   Eastern Europe's Trade Potential. A Gravity Model Approach. AA   University of Birmingham. SR   University of Birmingham, Department of Economics Discussion Paper: 97/20; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham   B15   2TT,   United   Kingdom.   Website: www.bham.ac.uk/economics. PG   25. PR   2 pounds; no charge to academics. JE   F15, F41, O52. KW   International Trade. Economic Integration. Gravity Trade.
AB   This paper applies the Gravity Trade Model (GTM) to assess Eastern Europe's trade, and trade potential following the major political changes of 1989. The GTM is an analytical framework for explaining bilateral trade flows based on GDP, population and geographical distance between partners. The model is tested for a sample of countries which includes six Eastern European countries and for the years 1985, 1992 and 1995. The results broadly confirm the conclusions of previous studies, but there are some interesting variations. The implications for East- West trade in Europe are discussed and found to be profound.

Nandeibam, Shasikanta
TI   An Integral Inequality on C([0,1]) with Application to the Ornstein- Uhlenbeck Process. AU   Bailey, Ralph W.; Burridge, Peter; Nandeibam, Shasikanta.

PD   March 1998. TI   The Structure of Probabilistic Social Choice Correspondences. AA   University of Birmingham. SR   University of Birmingham, Department of Economics Discussion Paper: 98/06; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham   B15   2TT,   United   Kingdom.   Website: www.bham.ac.uk/economics. PG   22. PR   2 pounds; no charge to academics. JE   D71. KW   Social Choice. Coalitions. Lotteries. Power Index.
AB   This paper considers the distribution of coalitional influence under probabilistic social choice correspondences, which are randomized social choice rules that map each combination of a preference profile and a feasible subset of the universal set to a social choice lottery over the subsets of the feasible set. Under certain conditions, independence of irrelevant alternatives and regularity are imposed, and the authors show that: (i) there is a power index for each coalition in the society which can be interpreted as the coalition's probability of being decisive in binary choice situations; and (ii) for each combination of a feasible proper subset of the universal set and a preference profile, the society can be partitioned in such a way that for each coalition in this partition, the probability of society choosing a set contained in the union of the best sets of its members is equal to the coalition's power index.

Nelson, Douglas
TI   A Geometry of Specialization. AU   Francois, Joseph F.; Nelson, Douglas.

Nesterov, Yurii
PD   March 1997. TI   Quality of Semidefinite Relaxation for Nonconvex Quadratic Optimization. AA   Universite Catholique de Louvain. SR   Universite Catholique de Louvain CORE Discussion Paper: 9719; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG   10. PR $100 per year. JE   C61. KW   Semidefinite   Relaxation. Optimization. Nonconvex Quadratic. Absolute Accuracy.
AB   In this paper the authors prove that the semidefinite relaxation of boolean quadratic maximization problem with indefinite matrix provides a fixed absolute accuracy estimate for the exact solution.

PD   June   1997.   TI   Semidefinite   Relaxation   and Nonconvex   Quadratic   Optimization.   AA   Universite Catholique de Louvain. SR   Universite Catholique de Louvain CORE Discussion Paper: 9744; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html.   PG   12.   PR $100 per year. JE   C61. KW   Relative Accuracy. Semidefinite Relaxation. Optimization.
AB   In this paper the authors consider the semidefinite relaxation of some global optimization problems. They prove that in some cases this relaxation provides a constant relative accuracy estimate for the exact solution.

PD   July 1997. TI   Structure of Non-Negative Polynomials and Optimization Problems. AA   Universite Catholique de Louvain. SR   Universite Catholique de Louvain CORE Discussion Paper: 9749; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG   13. PR $100 per year. JE   C61.   KW   Cones.   Polynomials.   Positive Semidefiniteness. Optimization.
AB   In this paper the authors give an explicit description of the cone of univariate non-negative polynomials in terms of the cone of positive semidefinite matrices. As a consequence of that result, the authors get a description of the cones of polynomials, which are non-negative on a ray and on an interval, and the description of non-negative trigonometric polynomials. They present some extension of these results for the multi-dimensional case.

Neuman, Shoshana
TI   The Extra Burden of Moslem Wives: Clues From Israeli Women's   Labour   Supply.   AU   Grossbard-Shechtman, Shoshana; Neuman, Shoshana.

Neumann, Manfred J. M.
TI   The Political Economy of Inflation and Central Bank Independence. AU   Herrendorf, Berthold; Neumann, Manfred J. M.

Neumark, David
TI   Cohort Crowding and Youth Labor Markets: A Cross-National Analysis.   AU   Korenman, Sanders; Neumark, David.

Nino-Mora, Jose
TI   Scheduling Multiclass Queueing Networks on Parallel Servers: Approximate and Heavy-Traffic Optimality of Klimov's Rule.   AU   Glazebrook, Kevin D.; Nino-Mora, Jose.

Nivorozhkin, Eugeniy
TI   The Capital Structure of Listed Companies in Poland.   AU   Hussain, Qaizar; Nivorozhkin, Eugeniy.

O'Brien, R. J.
PD   April 1997.   TI   Further Curiosa in "Spurious" Cointegration.   AA   University of Southampton.   SR   University of Southampton Discussion Papers in Economics and Econometrics: 9704; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton SO17 1BJ, England. Website: www.soton.as.uk/discp.html.   PG   45.   PR   on application.   JE   C10, C22.   KW   Spurious Cointegration. Johansen Tests. Engle-Granger Procedure.
AB   This paper generalizes these results, then extends the investigation to include the effects of prior unit root tests, and of testing for zeros in the cointegrating vectors, to reveal the problem. Monte Carlo experiments suggest the effect remains noticeable in samples of moderate size. An asymptotic analysis of the Engle-Granger procedure for testing for cointegration explains other published results which indicate that this procedure has rather different difficulties when faced with intercept shifts.

O'Connell, Paul G. J.
TI   On the Pricing of Intermediated Risks: Theory and Application to Catastrophe Reinsurance.   AU   Froot, Kenneth A.; O'Connell, Paul G. J.

TI   The Pricing of U.S. Catastrophe Reinsurance.   AU   Froot, Kenneth A.; O'Connell, Paul G. J.

Ohanian, Lee E.
TI   Capital-Skill Complementarity and Inequality: A Macroeconomic Analysis.   AU   Krusell, Per; Ohanian, Lee E.; Rios-Rull, Jose-Victor; Violante, Giovanni L.

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

TI   Is There a Trend Break in U.S. GNP? A Macroeconomic Perspective.   AU   Kilian, Lutz; Ohanian, Lee E.

TI   The Demand for Money and the Nonneutrality of Money.   AU   Cole, Harold L.; Ohanian, Lee E.

PD   June 1998.   TI   The Defining Moment: A Review Essay.   AA   Federal Reserve Bank of Minneapolis and University of Minnesota.   SR   Federal Reserve Bank of Minneapolis Staff Report: 248; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us.   PG   9.   PR   no charge.   JE   E30, E60.   KW   Great Depression. Government Policy.

AB   This paper reviews The Defining Moment, edited by Michael D. Bordo, Claudia Goldin, and Eugene N. White. The volume studies how the Great Depression changed government policies, including changes in monetary policy, fiscal policy, banking policy, agricultural policy, social insurance, and international economic policy. I argue that a theory of policy evolution is required to answer how the Great Depression affected these policies. In the absence of this theory, the contributors provide insight into the question by showing how policies changed sharply in the 1930's with little or no historical precedent or by showing how policies were tied to political or other considerations unique to the period. While this volume doesn't always provide answers to the questions posed, it does raise a fundamental issue in the analysis of government policy: Why during some crisis periods are bad policies adopted, whereas during other periods, they are not?.

TI   Complex Eigenvalues and Trend-Reverting Fluctuations.   AU   Azariadis, Costas; Bullard, James; Ohanian, Lee E.

Ortega, Eva
PD   November 1998.   TI   The Spanish Business Cycle and its Relationship to Europe.   AA   Banco de Espana.   SR   Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9819; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid, Spain. Website: www.bde.es.   PG   32.   PR   Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency.   JE   C52, D58, E32, F15, F41.   KW   Business Cycles. Real Business Cycle. Model Evaluation. Transmission. Europe.
AB   This paper studies the relationship between Spanish real aggregate fluctuations and those of its European neighbors in the last decade. It studies the ability of alternative International Real Business Cycle models (based on Backus, Kehoe and Kydland (1994)) with different degrees of international interdependencies to capture the observed co-movements between Spanish and European business cycles, and compares the fit of those models using a probabilistic measure based on Gregory and Smith (1991, 1993) and Canova (1994, 1995). It is found that (i) common shocks are important and that (ii) mechanisms of international transmission of shocks other than trade in consumption goods and services and spillovers in total factor productivity shocks are required in order to explain the joint fluctuations of Spain and its European neighbors.

PD   November 1998.   TI   Comparing Evaluation Methodologies for Stochastic Dynamic General Equilibrium Models.   AA   Banco de Espana.   SR   Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9820; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid, Spain. Website: www.bde.es.   PG   28.   PR   Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency.   JE   C15, C52, D58.   KW   Calibration. Simulation. Model Evaluation. Monte Carlo. General Equilibrium.
AB   This paper tests the performance of the approaches of Watson (1993), DeJong, Ingram and Whiteman (1996), Canova and De Nicolo (1995) and Ortega (1998) for evaluating stochastic dynamic general equilibrium models using Monte Carlo techniques. It asks: Do different model evaluation methodologies effectively improve an informal approach as in the typical calibration exercise? The Monte Carlo experiments evaluate the ability of each methodology to accept a model

when it is equal to the actual DGP and to reject it when it is at odds with the actual DGP. In a sense, we are treating each methodology as a test for an economic model and compute its "size" and "power", respectively. The authors find that all four methodologies outperform the informal approach since they substantially reduce the risk of rejecting the true DGP and are able to discriminate more clearly between the DGP and models different to it.

PD November 1998. **TI** Assessing the Fit of Simultaed Multivariate Dynamic Models. **AA** Banco de Espana. **SR** Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9821; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid, Spain. Website: www.bde.es. **PG** 24. **PR** Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. **JE** C15, C32, C52, C68. **KW** Measure of Fit. Spectral Density. Simulations. Monte Carlo. Calibration.
AB This paper develops a formal framework based on multivariate techniques for assessing the performance of multivariate dynamic models whose solution is approximated through simulation. The approach is especially suitable for models that focus on a particular frequency range, such as business cycle models. An asymptotic test is presented for assessing how well a simulated model reproduces the dynamic properties of a vector of actual series. A further test is then derived to compare the relative performance of alternative model specifications with respect to the multivariate vector of interest. Monte Carlo evidence is provided to show the finite sample behavior of the tests. Both tests are found to have high power even for small sample sizes. As an application, the authors evaluate to what extent different versions of a two-country two-good International Real Business Cycle model can reproduce the interdependencies observed between the U.S. and European real GDP at business cycle frequencies.

Ottaviano, Gianmarco I.
TI Global Income Divergence, Trade and Industrialization: The Geography of Growth Take-Offs. **AU** Baldwin, Richard E.; Martin, Philippe; Ottaviano, Gianmarco I.

Page, Frank H., Jr.
TI Optimal Selling Mechanisms for Multiproduct Monopolists: Incentive Compatibility in the Presence of Budget Constraints. **AU** Klinger Monteiro, Paulo; Page, Frank H., Jr..

Pages, Jorge Martinez
TI How Informative are Financial Asset Prices in Spain? **AU** Alonso, Francisco; Ayuso, Juan; Pages, Jorge Martinez.

Papi, Laura
TI An Econometric Analysis of the Determinants of Inflation in Turkey. **AU** Lim, Cheng Hoon; Papi, Laura.

Parente, Stephen L.
PD July 1997. **TI** Monopoly Rights: A Barrier to Riches. **AU** Parente, Stephen L.; Prescott, Edward C. **AA** Parente: University of Pennsylvania. Prescott: Federal Reserve Bank of Minneapolis and University of Minnesota. **SR** Federal Reserve Bank of Minneapolis Staff Report: 236; Research Department, Federal Reserve Bank of Minneapolis, 250

Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. **PG** 36. **PR** no charge. **JE** O10, O40. **KW** Monopoly. Inefficient Production. International Income Differences.
AB Our thesis is that poor countries are poor because they employ arrangements for which the equilibrium outcomes are characterized by inferior technologies being used, and being used inefficiently. In this paper, we analyze the consequences of one such arrangement. In each industry, the arrangement enables a coalition of factor suppliers to be the monopoly seller of its input services to all firms using a particular production process. We find that the inefficiencies associated with this monopoly arrangement can be large. Whereas other studies have found that inefficiencies induced by monopoly are at most a few percent of output, we find that eliminating this monopoly arrangement could well increase output by roughly a factor of 3 without any increase in inputs.

Park, Byeong U.
TI On Estimation of Monotone and Concave Frontier Functions. **AU** Gijbels, Irene; Mammen, Enno; Park, Byeong U.; Simar, Leopold.

Park, Joon Y.
TI Nonstationary Density Estimation and Kernel Autoregression. **AU** Phillips, Peter C. B.; Park, Joon Y.

PD June 1998. **TI** Asymptotics for Nonlinear Transformations of Integrated Time Series. **AU** Park, Joon Y.; Phillips, Peter C. B. **AA** Phillips: Yale University. Park: Seoul National University. **SR** Yale Cowles Foundation Discussion Paper: 1182; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 27. **PR** no charge up to 3 papers; $3.00 domestic; 4.00 International. **JE** C22. **KW** Brownian Motion. Integrated Process. Local Time. Nonlinear Transformation. Occupation Time. Regression Asymptotics.
AB An asymptotic theory for stochastic processes generated from nonlinear transformations of nonstationary integrated time series is developed. Various nonlinear functions of integrated series such as ARIMA time series are studied, and the asymptotic distributions of sample moments of such functions are obtained and analyzed. The transformations considered in the paper include a variety of functions that are used in practical nonlinear statistical analysis. It is shown that their asymptotic theory is quite different from that of integrated processes and stationary time series. When the transformation function is exponentially explosive, for instance, the convergence rate of sample functions is path-dependent. In particular, the convergence rate depends not only the size of the sample, but also on the realized sample path. Some brief applications of these asymptotics are given to illustrate the effects of nonlinear transformed integrated processes on regression. The methods developed in the paper are useful in a project of greater scope concerned with the development of a general theory of nonlinear regression for nonstationary time series.

PD August 1998. **TI** Nonlinear Regressions with Integrated Time Series. **AU** Park, Joon Y.; Phillips, Peter C. B. **AA** Park: Seoul National University. Phillips: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1190; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 64. **PR** no charge up

to 3 papers; $3.00 domestic; 4.00 International. JE C22. KW Brownian Motion. Integrated Process. Local Time. Nonlinear Transformations. Nonparametric Density. Occupation Time. Nonlinear Regression.
AB An asymptotic theory is developed for nonlinear regressions with integrated processes. The models allow for nonlinear effects from unit root time series and therefore deal with the case of parametric nonlinear cointegration. The theory covers integrable, asymptotically homogeneous and explosive functions. Sufficient conditions for weak consistency are given and a limit distribution theory is provided. In general, the limit theory is mixed normal with mixing variates that depend on the sojourn time of the limiting Brownian motion of the integrated process. The rates of convergence depend on the properties of the nonlinear regression function, and are shown to be as slow as n to the 1/4 for integrable functions, to be generally polynomial in n to the 1/2 for homogeneous functions, and to be path dependent in the case of explosive functions.

Parker, Jeffrey S.
TI Fact-Finding Efficiency in Legal Procedure: An Experimental Comparison of Adversarial Versus Inquisitorial Regimes. AU Block, Michael; Parker, Jeffrey S.; Vyborna, Olga; Dusek, Libor.

Pascoa, Mario R.
TI Discreteness of Equilibria in Incomplete Markets With a Continuum of States. AU Klinger Monteiro, Paulo; Pascoa, Mario R.

Patel, Jayendu
PD January 1998. TI Earnings Management to Exceed Thresholds. AU Patel, Jayendu; Degeorge, Francois; Zeckhauser, Richard. AA Patel: Boston University. Degeorge: HEC School of Management. Zeckhauser: Harvard University. SR Centre for Economic Policy Research Discussion Paper: 1790; 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 G31, G32, M10. KW Earnings Management. Behavioral Finance. Thresholds. Corporate Governance.
AB Investors are keenly interested in financial reports of earnings because earnings provide important information for investment decisions. Thus, executives who are monitored by investors and directors face strong incentives to manage earnings. We introduce consideration of behavioral/institutional thresholds for earnings in this mix of incentives and governance. A model illustrates how thresholds induce specific types of earnings management. Empirical explorations find clear support for earnings management to exceed each of the three thresholds that we consider: positive profits, sustain-recent-performance, and meet-market-expectations. The thresholds are hierarchically ranked. The future performance of firms that possibly boost earnings to just cross a threshold appears to be poorer than that of less suspect control groups.

Pattillo, Catherine
PD December 1997. TI Investment, Uncertainty, and Irreversibility in Ghana. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/169; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 37. PR not available. JE C24, D81, D92. KW Investment. Uncertainty. Irreversibility. Ghana.
AB Panel data on Ghanaian manufacturing firms are used to test predictions from models of irreversible investment under uncertainty. Information on the entrepreneur's subjective probability distribution over future demand for the firm's products is used to construct the expected variance of demand, which is used as a measure of uncertainty. Empirical results support the prediction that firms wait to invest until the marginal revenue product of capital reaches a firm-specific hurdle level. Moreover, higher uncertainty raises the hurdle level that triggers investment, and uncertainty has a negative effect on investment levels that is greater for firms with more irreversible investment.

Pazarbasioglu, Ceyla
TI Lessons From Systemic Bank Restructuring: A Survey of 24 Countries. AU Dziobek, Claudia; Pazarbasioglu, Ceyla.

Pearlman, Joseph
TI Monetary Union: The Ins and Outs of Strategic Delegation. AU Levine, Paul; Pearlman, Joseph.

Penalosa, Juan
TI The Controllability of a Monetary Aggregate in EMU. AU Cabrero, Alberto; Escriva, Jose Luis; Munoz, Emilio; Penalosa, Juan.

Perotti, Roberto
PD November 1997. TI Sustainability of Public Finances. AU Perotti, Roberto; von Hagen, Jurgen; Strauch, Rolf. AA Perotti: Columbia University. von Hagen: Universitat Mannheim and Rheinische Friedrich-Wilhelms-Universitat. Strauch: University of Bonn and Rheinische Friedrich-Wilhelms-Universitat. SR Centre for Economic Policy Research Discussion Paper: 1781; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 68. PR 5 pounds or $10.00. JE E62, F33, H61, H62, H87. KW Sustainability. European Monetary Union. Debt. Public Finance. Deficit.
AB A central tenet of the Maastricht Treaty is that a successful European Monetary Union requires sustainable public finances of its member states. Yet there is no clear definition of sustainability. In this study, the authors develop a concept of sustainability focusing on the controllability of public finances. In so doing, they adopt the approach of the Maastricht Treaty, to assume sustainability as long as a country does not violate the double standards of the deficit (3%) and the debt (60% of GDP) criterion. When the benign assumption does not hold, the authors distinguish between the symptoms of non-sustainability of public finances, which can be determined in a relatively straightforward way, and the underlying institutional causes, which are more difficult to identify. Correcting the symptoms requires a desegregate view of the government budget. Successful consolidation requires the fiscal policy problem to be addressed "at the source".

Persson, Torsten
TI Political Economics and Macroeconomic Policy. AU Tabellini, Guido; Persson, Torsten.

Pestieau, Pierre
TI Tax Competition and Revelation of Preferences for

Public Expenditure. AU Bucovetsky, Sam; Marchand, Maurice; Pestieau, Pierre.

Philipson, Tomas

TI The Future of Old-Age Longevity: Competitive Pricing of Mortality Contingent Claims. AU Mullin, Charles; Philipson, Tomas.

Phillips, Peter C. B.

PD June 1998. TI Econometric Analysis of Fisher's Equation. AA Yale University. SR Yale Cowles Foundation Discussion Paper: 1180; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. PG 34. PR no charge up to 3 papers; $3.00 domestic; 4.00 International. JE B22, C22. KW Fractional Integration. Hazard Rate. Interest Rates. Semiparametric Estimation. Sojourn Time. Spatial Density.

AB Fisher's equation for the determination of the real rate of interest is studied from a fresh econometric perspective. Some new methods of data description for nonstationary time series are introduced. The methods provide a nonparametric mechanism for modelling the spatial densities of a time series that displays random wandering characteristics, like interest rates and inflation. Hazard rate functionals are also constructed, an asymptotic theory is given and the techniques are illustrated in some empirical applications to real interest rates for the U.S. The paper ends by calculating Gaussian semiparametric estimates of long range dependence in U.S. real interest rates, using a new asymptotic theory that covers the nonstationary case. The empirical results indicate that the real rate of interest in the U.S. is (fractionally) nonstationary over 1934-1997 and over the more recent subperiods 1961-1985 and 1961-1997. Unit root nonstationarity and short memory stationarity are both strongly rejected for all these periods.

PD June 1998. TI Nonstationary Density Estimation and Kernel Autoregression. AU Phillips, Peter C. B.; Park, Joon Y. AA Phillips: Yale University. Park: Seoul National University. SR Yale Cowles Foundation Discussion Paper: 1181; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. PG 25. PR no charge up to 3 papers; $3.00 domestic; 4.00 International. JE C22. KW Brownian Sheet. Kernel Regression. Local Time. Martingale Embedding. Mixture Normal. Nonstationary Density. Occupation Time. Quadratic Variation.

AB An asymptotic theory is developed for the kernel density estimate of a random walk and the kernel regression estimator of a nonstationary first order autoregression. The kernel density estimator provides a consistent estimate of the local time spent by the random walk in the spatial vicinity of a point that is determined in part by the argument of the density and in part by initial conditions. The kernel regression estimator is shown to be consistent and to have a mixed normal limit theory. The limit distribution has a mixing variate that is given by the reciprocal of the local time of a standard Brownian motion. The permissible range for the bandwidth parameter h sub n includes rates which may increase as well as decrease with the sample size n, in contrast to the case of a stationary autoregression. However, the convergence rate of the kernel regression estimator is at most n to the 1/4, and this is slower than that of a stationary kernel autoregression, in contrast to the parametric case. In spite of these differences in the limit theory and the rates of convergence between the stationary and nonstationary cases, it is shown that the usual formulae for confidence intervals for the regression function still apply when h sub n goes to zero.

TI Asymptotics for Nonlinear Transformations of Integrated Time Series. AU Park, Joon Y.; Phillips, Peter C. B.

PD August 1998. TI A Primer on Unit Root Testing. AU Phillips, Peter C. B.; Xiao, Zhijie. AA Phillips: Yale University. Xiao: University of Illinois, Urbana-Champaign. SR Yale Cowles Foundation Discussion Paper: 1189; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. PG 57. PR no charge up to 3 papers; $3.00 domestic; 4.00 International. JE C22. KW Unit Root. Brownian Motion. Integrated Process. LM Principle. Nonstationarity. Quasi-Differencing. Stochastic Trend.

AB The immense literature and diversity of unit root tests can at times be confusing even to the specialist and presents a truly daunting prospect to the uninitiated. In consequence, much empirical work still makes use of the simplest testing procedures because it is unclear from the literature and from recent reviews which tests if any are superior. This paper presents a survey of unit root theory with an emphasis on testing principles and recent developments. The general framework adopted makes it possible to consider tests of stochastic trends against trend stationarity and trend breaks of a general type. The main tests are listed, and asymptotic distributions are given in a simple form that emphasizes commonalities in the theory. Some simulation results are reported, and an extensive list of references and an annotated bibliography are provided.

TI Nonlinear Regressions with Integrated Time Series. AU Park, Joon Y.; Phillips, Peter C. B.

PD August 1998. TI How to Estimate Autoregressive Roots Near Unity. AU Phillips, Peter C. B.; Moon, Hyungsik; Xiao, Zhijie. AA Phillips: Yale University. Moon: University of California, Santa Barbara. Xiao: University of Illinois, Urbana-Champaign. SR Yale Cowles Foundation Discussion Paper: 1191; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. PG 41. PR no charge up to 3 papers; $3.00 domestic; 4.00 International. JE C22. KW Near Unity. Consistent Estimation. Diffusion. Invariance Principle. Efficient Detrending. Near Integration.

AB A new model of near integration is formulated in which the local to unity parameter is identifiable and consistently estimable with time series data. The properties of the model are investigated, new functional laws for near integrated time series are obtained, and consistent estimators of the localizing parameter are constructed. The model provides a more complete interface between I(0) and I(1) models than the traditional local to unity model and leads to autoregressive coefficient estimates with rates of convergence that vary continuously between the O(square root of n) rate of stationary autoregression, the O(n) rate of unit root regression and the power rate of explosive autoregression. Models with deterministic trends are also considered, least squares trend regression is shown to be efficient, and consistent estimates of the localizing parameter are obtained for this case as well. Conventional unit root tests are shown to be consistent against local alternatives in the new class.

TI Higher Order Approximations for Wald Statistics in Cointegrating Regressions. AU Xiao, Zhijie; Phillips, Peter C. B.

PD   October 1998. TI   New Unit Root Asymptotics in the Presence of Deterministic Trends. AA   Yale University. SR   Yale Cowles Foundation Discussion Paper: 1196; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. PG   27. PR   no charge up to 3 papers; $3.00   domestic;   4.00   International.   JE   C22. KW   Detemimistic Trends. Divergent Critical Values. Large K Asymptotics. Test Failure. Unit Root Distributions.

AB   Recent work by the author (1998) has shown that stochastic trends can be validly represented in empirical regressions in terms of deterministic functions of time. These representations offer an alternative mechanism for modeling stochastic trends. It is shown here that the alternate representations affect the asymptotics of all commonly used unit root tests in the presence of trends. In particular, the critical values of unit root tests diverge when the number of deterministic regressors K goes to infinity as the sample size n goes to infinity. In such circumstances, use of conventional critical values based on fixed K will lead to rejection of the null of a unit root in favor of trend stationarity with probability one when the null is true. The results can be interpreted as saying that serious attempts to model trends by deterministic functions will always be successful and that these functions can validly represent stochastically trending data even when lagged variables are present in the regressor set, thereby undermining conventional unit root tests.

TI   Rissanen's Theorem and Econometric Time Series. AU   Ploberger, Werner; Phillips, Peter C. B.

Piccione, Michele

TI   Equilibria in Networks. AU   Hendricks, Ken; Piccione, Michele; Tan, Guofo.

TI   On the Equivalence of Simultaneous and Sequential Binary Elections. AU   Dekel, Eddie; Piccione, Michele.

Pippenger, John

PD   May 1998. TI   Modeling Foreign Exchange Markets: Stock Versus Flow. AA   University of California, Santa Barbara. SR   University of California, Santa Barbara, Working Papers in Economics: 08/98; Department of Economics, Working Paper Coordinator, University of California, Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. PG   55. PR   no charge. JE   F32, G12. KW   Exchange Rates. Asset Models. Stock Models. Flow Models.

AB   Shortly after the collapse of Bretton Woods, stock models replaced the traditional flow approach for modeling short-run exchange rates. However after 20 years, portfolio balance and other asset models have not improved our understanding of the short-run behavior of exchange rates. Perhaps it is time to consider an integrated approach that combines asset and traditional flow approaches. Section I critically reviews the reasons for the switch from flow to stock. Section II points out some evidence inconsistent with portfolio balance and related asset models. Section III integrates flows and stocks. Sections IV, V and VI develop some implications of the integrated model, describe the data and construct tests. Test results support an integrated approach. Since the tests used to discriminate between the two approaches involve foreign exchange intervention, the results also provide new evidence about intervention.

Ploberger, Werner

PD   October   1998.   TI   Rissanen's   Theorem   and Econometric Time Series. AU   Ploberger, Werner; Phillips, Peter C. B. AA   Ploberger: University of Rochester. Phillips: Yale University. SR   Yale Cowles Foundation Discussion Paper: 1197; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. PG   14. PR   no charge up to 3 papers; $3.00 domestic; 4.00 International. JE   C22. KW   Complexity.   Data   Generating   Process.   Fisher Information. Model Selection. Optimal Prediction. Parsimony. Trends.

AB   In a typical empirical modeling context, the data generating process (DGP) of a time series is assumed to be known up to a finite- dimensional parameter. In such cases, Rissanen's (1986) theorem provides a lower bound for the empirically achievable distance between all possible data-based models and the true DGP. This distance depends only on the dimension of the parameter space. The present paper examines the empirical relevance of this notion to econometric time series and discusses a new version of the theorem that allows for nonstationary DGP's. Nonstationarity is relevant in many economic applications and it is shown that the form of nonstationarity affects, and indeed increases, the empirically achievable distance to the true DGP.

Poddar, Sougata

PD   January 1997. TI   Capacity and Entry Deterrence Under Demand Uncertainty. AA   University of Copenhagen. SR   Universite Catholique de Louvain CORE Discussion Paper: 9708; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG   19. PR $100 per year. JE   D43, L13. KW   Demand Uncertainty. Capacity. Entry Deterrence. Imperfect Markets.

AB   I consider a two period model with an incumbent firm and a potential entrant each of whom produces a homogeneous good. There is a demand uncertainty: it can be high or low and it realizes in the second period. The question I ask: How by choosing capacity at an earlier period of actual production of output and more importantly not knowing which state of demand is going to realize and knowing that there is a potential entrant, the incumbent firm can influence the outcome of the game by changing its initial condition. To that end, I study how the impact of the distribution of uncertainty deeply affects the incumbent's   decision   regarding   entry deterrence/accommodation. I compare the results with the case where there is no uncertainty.

PD   January 1997. TI   Capacity and Entry Deterrence Under Asymmetric Information on Demand. AA   University of Copenhagen. SR   Universite Catholique de Louvain CORE Discussion Paper: 9709; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG   17. PR $100 per year. JE   D43, D82, L13. KW   Demand Uncertainty. Capacity. Entry Deterrence. Asymmetric Information. Signaling.

AB   I consider a two period model with an incumbent firm and a potential entrant each of whom produces a homogeneous good. There is a demand uncertainty and the information regarding the demand is asymmetric: the incumbent possesses private information concerning the state of demand while the entrant only knows the probability distribution. I show that

under a certain cost structure of the incumbent (which is common knowledge), using capacity as a signalling device, the incumbent can reliably convey the information to the potential entrant regarding the state of demand; while in some other cost environment such a signaling has no effect. Outcomes are more desirable when signaling truly reveals and more importantly convinces the entrant about the true state of demand compared to those where signaling does not reveal.

Poirson, Helene

PD January 1998. TI Economic Security, Private Investment, and Growth in Developing Countries. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/04; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 31. PR not available. JE O40. KW Private Investment. Growth. Political Economy.
AB This paper provides empirical support for the view that enhanced economic security fosters private investment and growth in developing countries. An analysis for 53 developing countries suggests that most aspects of economic security have improved since the mid-1980's; that private investment is mostly influenced by the risk of expropriation, the degree of civil liberty, and the degree of independence of the bureaucracy; and that economic growth is affected by the risk of expropriation and political terrorism in the short run, and by corruption and contract repudiation in the long run.

Polak, Ben

TI On the Skiadal "Conditional Preference Approach" to Choice Under Uncertainty. AU Grant, Simon; Kajii, Atsushi; Polak, Ben.

Ponti, Giovanni B.

PD October 1997. TI Continuous-Time Evolutionary Dynamics and Their Economic Applications. AA University of California, Santa Barbara. SR University of California, Santa Barbara, Working Papers in Economics: 15/97; Working Papers in Economics, Department of Economics, University of California, Santa Barbara 93106. Website: www.econ.ucsb.edu. PG 25. PR no charge. JE C62, C73. KW Game Theory. Equilibrium Analysis. Bounded Rationality. Learning Theory.
AB The paper surveys some recent developments in the literature which study continuous-time evolutionary dynamics in the context of economic modeling.

PD October 1997. TI Cycles of Learning in the Centipede Game. AA University of California, Santa Barbara. SR University of California, Santa Barbara, Working Papers in Economics: 16/97; Working Papers in Economics, Department of Economics, University of California, Santa Barbara 93106. Website: www.econ.ucsb.edu. PG 21. PR no charge. JE C72, C79. KW Evolutionary Game Theory. Backward-Induction. Monotonic Dynamics.
AB Traditional game theoretic analysis proposed backward induction as a model of rational behavior in games with perfect information. However, counterintuitive results have cast doubt on the predictive power of the theory. For example, in the Centipede Game, experimental evidence shows that subjects' behavior significantly differs from what the theory expects. In our paper, we construct a dynamic model based on the Centipede Game. Our claim is that the source of these

discrepancies between theory and experimental evidence can be explained by appealing to some form of bounded rationality. Traditional game theoretical analysis could then still accurately predict the players' behavior, provided that they are given time enough to appreciate the strategic environment in which they operate. We prove convergence to the subgame- perfect equilibrium outcome for any monotonic continuous-time selection dynamics (Nachbar (1990). By introducing perturbations, we also show that such adjustment processes are intrinsically unstable, and study how this instability is positively related with the length of the game.

PD February 1998. TI Evolutionary Stability of Inequality Structures. AU Ponti, Giovanni B.; Seymour, Robert M. AA Ponti: University of California, Santa Barbara and ELSE. Seymour: University College London and ELSE. SR University of California, Santa Barbara, Working Papers in Economics: 02/98; Department of Economics, Working Paper Coordinator, University of California, Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. PG 35. PR no charge. JE C70. KW Social Inequality. Conventions. Evolutionary Game Theory.
AB This paper is concerned with the evolutionary stability of social inequality structures. We study the evolution of a population whose members compare their relative wealth to coordinate their actions in a simple tacit bargaining game. We interpret the equilibrium behaviors that players may adopt as a consequence of their relative wealth, as customs. Two alternative customs are considered: one in which difference in wealth (i.e. difference in bargaining power) is large enough to justify difference in behavior, and another in which difference in wealth is perceived as negligible (and therefore not sufficient to justify a difference in behavior). Although we constrain the agents to follow either one or other of these two alternative bargaining strategies, we allow each individual to determine subjectively under which circumstances one behavior is to preferred to the other. In other words agents are assumed to place the boundaries of their reference class subjectively. An evolutionary (learning) dynamics is constructed in which players may change their class depending on the outcome of the game, and may also vary the boundaries of their reference class as a result of some adaptive process. We find that, if individuals form fixed, unambiguous images of their position in the social structure, then social inequality will eventually disappear, as the wealth of each individual converges to uniform level.

TI Implementation, Elimination of Weakly Dominated Strategies and Evolutionary Dynamics. AU Cabrales, Antonio; Ponti, Giovanni B.

Porter, Robert H.

PD May 1997. TI Ohio School Milk Markets: An Analysis of Bidding. AU Porter, Robert H.; Zona, J. Douglas. AA Porter: Northwestern University and National Bureau of Economic Research. Zona: National Economic Research Associates. SR National Bureau of Economic Research Working Paper: 6037; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 33. PR $5.00. JE L13, L41, L52, L66. KW Industrial Organization. Collusion. School Milk. Bidding. Oligopoly.
AB The authors examine the institutional details of the school milk procurement process, bidding data, statements of dairy executives, and supply characteristics in Ohio during the

1980's. They compare the bidding behavior of a group of firms to a control group. They find that the behavior of each of the firms differs from that of the control group. The authors argue that the behavior of these firms is consistent with collusion. The estimated average effect of collusion on market prices is about six and one half percent, or roughly the cost of shipping school milk about 50 miles.

Portugal, Pedro
TI   A Comparative Study of the Portuguese and Spanish Labour Markets. AU   Bover, Olympia; Garcia-Perea, Pilar; Portugal, Pedro.

Postlewaite, Andrew
TI   Efficient Non-Contractible Investments. AU   Cole, Harold L.; Mailath, George J.; Postlewaite, Andrew.

Prasad, Eswar S.
PD   December 1997. TI   International Evidence on the Determinants of Trade Dynamics. AU   Prasad, Eswar S.; Gable, Jeffery A. AA   International Monetary Fund. SR   International Monetary Fund Working Paper: WP/97/172; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG   43. PR   not available. JE   F32, F41. KW   Trade Balance. Business Cycles. Exchange Rates. OECD Industrial Economies.
AB   This paper provides some new empirical perspectives on the relationship between international trade and macroeconomic fluctuations in industrial economies. First, a comprehensive set of stylized facts concerning fluctuations in trade variables and their determinants are presented. A measure of the quantitative importance of international trade for the propagation of domestic business cycles is then constructed, focusing on the role of external trade as a catalyst for cyclical recoveries. Finally, structural vector autoregression models are used to characterize the joint dynamics of output, exchange rates, and trade variables in response to different types of macroeconomic shocks.

PD   April 1998. TI   The Italian Labor Market: Stylized Facts, Institutions, and Directions for Reform. AU   Prasad, Eswar S.; Utili, Francesca. AA   International Monetary Fund. SR   International Monetary Fund Working Paper: WP/98/42; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG   49. PR   not available. JE   J20, J31, J60. KW   Employment. Wage Structures. Labor Market Institutions. Rigidities. Policy Implications.
AB   This paper provides a synthesis of existing and new empirical perspectives on the structure of the Italian labor market, using data at different levels of disaggregation. The analysis indicates that aggregate data mask considerable disparities in labor market outcomes across regions and demographic groups. The evolutions of sectoral wage and employment structures also point to some dimensions of labor market rigidities. A micro data set with individual data is then used to highlight key structural problems that affect labor supply and demand. The implications of these different strands of empirical analysis for the formulation and effective implementation of labor market policy are then discussed.

Prescott, Edward C.
TI   Monopoly Rights: A Barrier to Riches. AU   Parente, Stephen L.; Prescott, Edward C.

PD   December 1997. TI   Needed: A Theory of Total Factor Productivity. AA   Federal Reserve Bank of Minneapolis and University of Minnesota. SR   Federal Reserve Bank of Minneapolis Staff Report: 242; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. PG   36. PR   no charge. JE   O11, O40, O47. KW   Total Factor Productivity. International Income Differences.
AB   This paper evaluates the argument that differences in physical and intangible capital can account for the large international income differences that characterize the world economy today. The finding is that they cannot. Savings rate differences are of minor importance. What is all-important is total factor productivity. In addition, the paper presents industry evidence that total factor productivities differ across countries and time for reasons other than differences in the publicly available stock of technical knowledge. These findings lead me to conclude a theory of TFP is needed. This theory must account for differences in TFP that arise for reasons other than growth in the stock of technical knowledge.

Proudman, James
PD   March 1998. TI   Persistence and Mobility in International Trade. AU   Proudman, James; Redding, Stephen. AA   Proudman: Bank of England. Redding: New College, Oxford. SR   Centre for Economic Policy Research Discussion Paper: 1802; 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   C10, F14, F43, O30. KW   Distribution Dynamics. International Trade. Learning By Doing. Markov Chains. Comparative Advantage.
AB   The theoretical literature on endogenous growth and international trade suggests that comparative advantage is endogenous. Sector-specific learning by doing and technology transfer respectively provide reasons why initial patterns of international specialization may persist or exhibit mobility over time. This paper evaluates the extent of persistence or mobility in trade in manufactured goods in Germany and the United Kingdom for the period 1970-93. A measure of the extent of specialization is presented and its evolution over time modeled as a sequence of cross-section distributions. Evidence of considerable mobility is found, with the degree of mobility in the United Kingdom exceeding that in Germany.

Puga, Diego
PD   January 1998. TI   Agglomeration and Economic Development: Import Substitution Versus Trade Liberalization. AU   Puga, Diego; Venables, Anthony J. AA   London School of Economics. SR   Centre for Economic Policy Research Discussion Paper: 1782; 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   F12, F13, O14, R12. KW   Import Substitution. Trade Liberalization. Agglomeration. Linkages. Development.
AB   This paper analyzes a model of economic development in which international inequalities in the location of industry and income are supported by the agglomeration of industry in a subset of countries. Economic development may not be a gradual process of convergence by all countries, but instead involves countries moving sequentially from the group of poor countries to the group of rich countries. The role of trade policy

in promoting industrialization is studied. While both import substitution and unilateral trade liberalization may be "successful" in attracting industry, they attract different sectors and welfare levels are higher under trade liberalization.

Qian, Yingyi
PD March 1998. TI Reform Without Losers: An Interpretation of China's Dual-Track Approach to Transition. AU Qian, Yingyi; Roland, Gerard; Lau, Lawrence J. AA Qian and Lau: Stanford University. Roland: ECARE, Universite Libre de Bruxelles. SR Centre for Economic Policy Research Discussion Paper: 1798; 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 D50, D60, P21, P22, P41. KW Liberalization. Economic Reforms. Political Restraints. China. Transition.
AB We develop a simple model to analyze the "dual-track" approach to transition to a market economy as a mechanism for implementing efficient Pareto-improving economic reform, that is, reform achieving efficiency without creating losers. The approach, based on the continued enforcement of the existing plan while simultaneously liberalizing the market, can be understood as a method for making implicit lump-sum transfers to compensate potential losers of the reform. The model highlights the critical role of enforcement of the plan and full liberalization of the market track. We examine how the dual-track approach has worked in product and labor markets in China's economic reform in practice.

Qin, Cheng-Zhong
PD April 1997. TI Escrow, "Hostages", and Cooperation. AA University of California, Santa Barbara. SR University of California, Santa Barbara, Working Papers in Economics: 07/97; Department of Economics, Working Paper Coordinator, University of California, Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. PG 27. PR no charge. JE C70, C72, L14. KW Nash Equilibrium. Subgame Perfect. Prisoner's Dilemma.
AB A hostage from a player is held in escrow by a third-party and will be given to the opponent if the player takes a particular action. For a prisoner's dilemma game, it is shown that to support cooperation in subgame-perfect equilibrium, the values of hostages must be great enough (bounded below) to induce each to cooperate, but small enough (bounded above) to prevent each either from inducing the other to defect or from making it too costly to defect even if the opponent defects. Necessary and sufficient conditions for the existence of subgame-perfect equilibrium with cooperation are equivalent to lower bound being less than or equal to the upper bound.

TI On Market Games When Agents Cannot Be Two Places at Once. AU Garratt, Rod; Qin, Cheng-Zhong.

Rachev, Svetlosar T.
TI Optimal Policies for Investment with Time-Varying Return Distributions. AU Donchev, Doncho S.; Rachev, Svetlosar T.; Steigerwald, Douglas G.

Rajan, Raghuram G.
TI Power in a Theory of the Firm. AU Zingales, Luigi; Rajan, Raghuram G.

TI The Cost of Diversity: The Diversification Discount and Inefficient Investment. AU Zingales, Luigi; Rajan, Raghuram G.; Servaes, Henri.

Ramaswamy, Ramana
PD December 1997. TI The Real Effects of Monetary Policy in the European Union: What Are the Differences? AU Ramaswamy, Ramana; Sloek, Torsten. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/160; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 25. PR not available. JE E50, E52, E58. KW EMU. Monetary Transmission Mechanism.
AB The main finding of this paper is that the European Union (EU) countries fall into two broad groups according to the effects of monetary policy adjustments on economic activity. Estimates based on a vector autoregression model indicate that the full effects of a contractionary monetary shock on output in one group of EU countries (Austria, Belgium, Finland, Germany, Netherlands, and United Kingdom) take roughly twice as long to occur, but are almost twice as deep as in the other group (Denmark, France, Italy, Portugal, Spain, and Sweden). The paper discusses the implications of these results for the effective conduct of monetary policy in the euro area.

Ramey, Garey
TI Job Destruction and Propagation of Shocks. AU Den Haan, Wouter J.; Ramey, Garey; Watson, Joel.

PD October 1997. TI Contractual Intermediaries. AU Ramey, Garey; Watson, Joel. AA University of California, San Diego. SR University of California, San Diego, Department of Economics Working Paper: 97/26; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG 40. PR $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. JE D80, K40, C70. KW Alternative Dispute Resolution. Renegotiation. Enforcement. Long-Term Relationships.
AB We study the contract enforcement role of third-party intermediaries, such as lawyers and arbitrators, in long-term relationships. Agents are shown to voluntarily elicit the costly intervention of intermediaries in dispute resolution, despite their complete freedom to bypass the dispute resolution system if they choose. This enables dispute resolution systems to sustain cooperation where bilateral reputation and third-party bonding would be ineffective. In addition, ex post costs of using the system may be traded off against ex ante information costs in securing incentives to cooperate. We consider optimal design of dispute resolution systems and implications for alternative dispute resolution.

Rankin, Neil
PD December 1997. TI Staggered Wages and Disinflation Dynamics: What Can More Microfoundations Tell Us? AU Rankin, Neil; Ascari, Guido. AA University of Warwick. SR Centre for Economic Policy Research Discussion Paper: 1763; 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 E31, E52. KW Staggered Wages. General Equilibrium. Disinflation. Monetary Policy.
AB We study the output costs of a reduction in monetary

growth in a dynamic general equilibrium model with staggered wages. As in John Taylor's approach, the money wage is fixed for two periods, but in our model it is also chosen according to intertemporal optimization, as are consumption and money demand. Agents have labor market monopoly power. We show that the introduction of microfoundations helps to resolve the puzzle recently raised by Laurence Ball, namely that disinflation in staggered pricing models causes a boom. In our model disinflation, whether unanticipated or anticipated, unambiguously causes a slump.

Raphael, Steven
TI   School-Based Peer Effects and Juvenile Behavior.
AU   Gaviria, Alejandro; Raphael, Steven.

Razin, Assaf
TI   Sharp Reductions in Current Account Deficits: An Empirical Analysis. AU   Milesi-Ferretti, Gian Maria; Razin, Assaf.

Rebick, Marcus E.
PD   May 1998. TI   The Importance of Networks in the Market for University Graduates in Japan: A Longitudinal Analysis of Hiring Patterns. AA   Oxford University. SR   Centre for Economic Policy Research Discussion Paper: 1816; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG   31. PR   5 pounds or $10.00. JE   J41, J44. KW   Job Matching. Japan. Education. Graduates. Labor Market.
AB   This study examines the extent to which the transition from university education to work is characterized by persistent hiring flows between university faculties and firms, rather than being characterized by an open market process. Using a specially devised metric, the author finds that at least half of all hires can be explained by random open market processes, while one-third to one-half of hiring may be attributed to persistence in hiring by firms from specific faculties. In general, the importance of persistence increases as the difference in the quality of the faculty from which existing personnel in firms graduated, and the standard of faculties from which firms are hiring increases. This suggests that persistence exists to aid firms in screening students when they come from relatively low-standard faculties, and to establish a firm's reputation and assure a supply of graduates, especially in the case of lower quality firms.

Redding, Stephen
TI   Persistence and Mobility in International Trade.
AU   Proudman, James; Redding, Stephen.

Renstrom, Thomas I.
TI   Imperfect Competition, Labour Market Distortions and the Double Dividend Hypothesis. AU   Marsiliani, Laura; Renstrom, Thomas I.

PD   April 1998. TI   Tax Evasion as a Disciplinary Mechanism for Fiscal Policy. AA   University of Birmingham. SR   University of Birmingham, Department of Economics Discussion Paper: 97/27; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. Website: www.bham.ac.uk/economics. PG   24. PR   2 pounds; no charge to academics. JE   D31, D72, D91, H26, H30. KW   Tax Evasion. Fiscal Policy. Redistributive Taxation. Endogenous Taxation.
AB   The paper provides a theory where the size of the inspection authority and the size of the fines evolve endogenously. The authors find that if a society cannot commit to future taxes it may gain from committing to a small Inland Revenue Service and small punishments for tax evasion. The possibility of the public evading taxes limits the effectiveness of capital taxation. By setting detection probabilities and punishment relatively low, the government indirectly commits itself not to tax capital income too heavily in the future. The paper analyzes the factors determining the level of tax evasion when taxes and enforcement are endogenous. In particular the authors find that societies with a low level of initial wealth of the self employed, and more right-skewed distribution of wages, would experience a higher degree of tax evasion in politico-economic equilibrium.

Ricci, Luca Antonio
PD   February 1998. TI   Uncertainty, Flexible Exchange Rates, and Agglomeration. AA   International Monetary Fund. SR   International Monetary Fund Working Paper: WP/98/09; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG   34. PR   not available. JE   F12, F31, F33, F40, L16, R12. KW   Flexible Exchange Rates. Agglomeration. Two-Stage EMU.
AB   This paper shows that exchange rate variability promotes agglomeration of economic activity. Under flexible rates, firms located in large markets have lower variability of sales, reinforcing concentration of firms there. Empirical evidence on OECD countries demonstrates (1) that the negative effect of country size on variability of industrial production is stronger after the 1973 collapse of fixed rates and (2) for small (large) countries, exchange rates variability has a long-run negative (positive) effect on net inward FDI flows. Two implications arise: creating a currency area fosters agglomeration in the area, and a two-stage EMU may exacerbate the current uneven regional development.

Richards, Anthony
PD   December 1997. TI   Winner-Loser Reversals in National Stock Market Indices: Can They Be Explained? AA   International Monetary Fund. SR   International Monetary Fund Working Paper: WP/97/182; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG   22. PR   not available. JE   G12, G15. KW   International Equity Pricing. Winner-Loser Reversals. Contrarian Strategies.
AB   This paper examines possible explanations for "winner-loser reversals" in the national stock market indices of 16 countries. There is no evidence that loser countries are riskier than winner countries either in terms of standard deviations, covariance with the world market or other risk factors, or performance in adverse economic states of the world. While there is evidence that small markets are subject to larger reversals than large markets, perhaps because of some form of market imperfection, the reversals are not just a small-market phenomenon. The apparent anomaly of winner-loser reversals in national market indices therefore remains unresolved.

Rios-Rull, Jose-Victor
PD   May 1997. TI   Computation of Equilibria in

Heterogeneous Agent Models. **AA** Federal Reserve Bank of Minneapolis and University of Pennsylvania. **SR** Federal Reserve Bank of Minneapolis Staff Report: 231; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. Website: http://woodrow.mpls.frb.fed.us. **PG** 31. **PR** no charge. **JE** C63, C68. **KW** Computation. Heterogeneous Agents. Dynamic Voting.
AB This paper essentially puts together procedures that are used in the computation of equilibria in models with a very large number of heterogeneous agents. It is not a complete description of all procedures used in the literature. It describes procedures that deal with infinitely lived agent versions of the growth model with and without aggregate uncertainty, overlapping generations models, and dynamic political economy models.

TI On the Size of U.S. Government: Political Economy in the Neoclassical Growth Model. **AU** Krusell, Per; Rios-Rull, Jose-Victor.

TI Marital Risk and Capital Accumulation. **AU** Cubeddu, Luis; Rios-Rull, Jose-Victor.

TI Capital-Skill Complementarity and Inequality: A Macroeconomic Analysis. **AU** Krusell, Per; Ohanian, Lee E.; Rios-Rull, Jose-Victor; Violante, Giovanni L.

TI Capital-Skill Complementarity and Inequality: A Macroeconomic Analysis. **AU** Krusell, Per; Ohanian, Lee E.; Rios-Rull, Jose-Victor; Violante, Giovanni L.

Ritschl, Albrecht
TI Winning the War, Losing the Peace? Britain's Post-War Recovery in a West German Mirror. **AU** Eichengreen, Barry; Ritschl, Albrecht.

Robinson, James A.
TI Why Did the West Extend the Franchise? Democracy, Inequality and Growth in Historical Perspective. **AU** Acemoglu, Daron; Robinson, James A.

Rochet, Jean-Charles
TI Contracts and Productive Information Gathering. **AU** Cremer, Jacques; Khalil, Fahad; Rochet, Jean-Charles.

TI Strategic Information Gathering Before a Contract is Offered. **AU** Cremer, Jacques; Khalil, Fahad; Rochet, Jean-Charles.

Rodrik, Dani
PD January 1998. **TI** Democracies Pay Higher Wages. **AA** Columbia University. **SR** Centre for Economic Policy Research Discussion Paper: 1776; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.ccpr.demon.co.uk. **PG** 20. **PR** 5 pounds or $10.00. **JE** H40, J31, O15, P16. **KW** Democracy. Wages.
AB Controlling for labor productivity, income levels, and other possible determinants, there is a robust and statistically significant association between the extent of democratic rights and wages received by workers. The association exists both across countries and over time within countries. The coefficient estimates suggest that non-negligible wage improvements result from the enhancement of democratic institutions: average

wages in a country like Mexico would be expected to increase by 10-30% were Mexico to attain a level of democracy comparable to that prevailing in the United States.

PD January 1998. **TI** Where Did All the Growth Go? External Shocks, Social Conflict and Growth Collapses. **AA** Columbia University and Harvard University. **SR** Centre for Economic Policy Research Discussion Paper: 1789; 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** O40. **KW** Economic Growth. Social Conflicts. Conflict Management.
AB This paper argues that domestic social conflicts are a key to understanding why growth rates lack persistence and why so many countries have experienced a growth collapse after the mid-1970's. It emphasizes, in particular, the manner in which social conflicts interact with external shocks on the one hand, and the domestic institutions of conflict-management on the other. Econometric evidence provides support for this hypothesis. Countries that experienced the sharpest drops in growth after 1975 were those with divided societies (as measured by indicators of inequality, ethnic fragmentation etc.) and with weak institutions of conflict management (proxied by indicators of the quality of governmental institutions, rule of law, democratic rights, and social safety nets).

Roland, Gerard
TI Reform Without Losers: An Interpretation of China's Dual-Track Approach to Transition. **AU** Qian, Yingyi; Roland, Gerard; Lau, Lawrence J.

Roller, Lars-Hendrik
PD January 1998. **TI** Capacity and Product Market Competition: Measuring Market Power in a "Fat-Cat" Industry. **AU** Roller, Lars-Hendrik; Sickles, Robin C. **AA** Roller: INSEAD and Wissenschaftszentrum Berlin. Sickles: Rice University. **SR** Centre for Economic Policy Research Discussion Paper: 1788; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V 7DB, United Kingdom. Website: www.ccpr.demon.co.uk. **PG** 32. **PR** 5 pounds or $10.00. **JE** D23, L13, L52, L93. **KW** Market Power. Capacity Competition. Airlines.
AB This paper specifies and estimates a structural model which accounts for competition in two variables: capacity and prices. The model has a two-stage set-up. In the first stage firms make capacity decisions followed by a product-differentiated, price-setting game in the second stage. Simpler one-stage specifications would result in a bias in the measurement of market power, which can be linked to the taxonomy for two-stage games given in Fudenberg and Tirole (1984). The authors then estimate this model for the European airline industry using data for the period 1976-90. They perform a number of specification tests and reject a simple one-stage specification in favor of our two-stage set-up. They find that empirically the game is consistent with a fat-cat strategy. In other words, European airlines over-invest in capacities in order to be less aggressive. The authors find that some degree of market power in the product market exists.

Rosenberg, Christoph B.
PD January 1998. **TI** How to Deal With Azerbaijan's Oil Boom? Policy Strategies in a Resource-Rich Transition Economy. **AU** Rosenberg, Christoph B.; Saavalainen, Tapio

O. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/06; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 43. PR not available. JE F43, O53, Q33, Q43. KW Azerbaijan. Dutch Disease. Transition. Oil.
AB The petroleum-rich former Soviet republics around the Caspian Sea face the dual challenge of managing the transition to a market economy and a booming resource sector. This paper examines this challenge with particular reference to Azerbaijan. The standard "Dutch disease" model is modified to capture the special conditions of transition economies, with specific attention to the pattern of real exchange rate movement. "Transition factors" are found to add to the speed of real appreciation. Non-oil sectors may suffer, but less through the real appreciation than through transition-specific structural problems. The paper describes a medium-term policy strategy for Azerbaijan, relating its prospects to the experience in the 1970's of Ecuador, Indonesia, and Nigeria. The adverse effects of the Dutch disease may be avoided if Azerbaijan pursues policies to promote savings and open trade, and strengthens the supply side through structural policies.

Rosenberg, Dinah
TI   "Cav u" and the Dual Game. AU   De Meyer, Bernard; Rosenberg, Dinah.

Rosenberg, Joshua V.
PD   September 1997. TI   Option Hedging Using Empirical Pricing Kernels. AU   Rosenberg, Joshua V.; Engle, Robert F. AA   Rosenberg: New York University. Engle: University of California, San Diego. SR   University of California, San Diego, Department of Economics Working Paper: 97/20; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla,   CA   92093-0508.   Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG   19. PR $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents,   University   of   California.   JE   G12. KW ARCH/GARCH. Implied Volatilities. Option Pricing. Option Hedging. Pricing Kernel.
AB   This paper develops a method for option hedging which is consistent with time-varying preferences and probabilities. The preferences are expressed in the form of an empirical pricing kernel (EPK), which measures the state price per unit probability, while probabilities are derived from an estimated stochastic volatility model of the form GARCH components with leverage. State prices are estimated using the flexible risk-neutral density method of Rosenberg (1995) and a daily cross- section of option premia. Time-varying preferences over states are linked to a dynamic model of the underlying price to obtain a one-day ahead forecast of derivative price distributions and minimum variance hedge ratios. Empirical results suggest that risk aversion over S&P500 return states is substantially higher than risk aversion implied by Black-Scholes state prices and probabilities using long run estimates of S&P500 return moments. It is also found that the daily level of risk aversion is strongly positively autocorrelated, negatively correlated with S&P500 price changes, and positively correlated with the spread between implied and objective volatilities. Hedging results reveal that typical hedging techniques for out-of-the-money S&P500 index options, such Black-Scholes or historical minimum variance hedging, are inferior to the EPK hedging method. Thus, time-varying preferences and probabilities

appear to be an important factor in the day-to-day pricing of S&P500 options.

Ross, Kevin
PD   March 1998. TI   Post Stabilization Inflation Dynamics in   Slovenia.   AA   International   Monetary   Fund. SR   International Monetary Fund Working Paper: WP/98/27; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 29. PR not available. JE E30, F01. KW Inflation Inertia. Unrestricted VAR, Monetary Policy.
AB   This paper investigates the inflation process in Slovenia through an examination of some commonly used determinants of inflation in transition economies. Granger causality tests and an analysis of unrestricted VAR models suggest a strong linkage between both growth in broader monetary aggregates and changes in the tolar-deutsche mark exchange rate on retail price inflation. While the growth in wages affects inflation, it appears that both changes in the exchange rate and growth in monetary aggregates provide the initial impulse. A discussion of the present money-exchange rate policy framework and its influence on inflation is also provided.

Rossi, Marco
PD   April 1998. TI   Economic Announcements and the Timing of Public Debt Auctions. AA   Bank of England and International Monetary Fund. SR   International Monetary Fund Working Paper: WP/98/44; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 13. PR not available. JE D44, G14, H63. KW Debt Management. Public Debt Auctions. Financial Markets Efficiency.
AB   Most treasuries around the world sell their securities at auctions either directly or indirectly through an agent, usually the central bank. Although they can control both the rules and the timing of the auction, they may not be able to control the information and valuations of bidders. The purpose of this paper is to identify those economic indicators whose announcement is likely to have a significant impact on government securities prices and, hence, on bidders' behavior at auctions of government securities. This information could be used to schedule treasury securities auctions so as to minimize public debt management costs.

Rovesti, Cinzia
TI   Antitrust Policy and Price Collusion: Public Agencies Versus Delegation? AU   Martini, Gian Maria; Rovesti, Cinzia.

Saavalainen, Tapio O.
TI   How to Deal With Azerbaijan's Oil Boom? Policy Strategies   in   a   Resource-Rich   Transition   Economy. AU   Rosenberg, Christoph B.; Saavalainen, Tapio O.

Safra, Zvi
PD   March 1997. TI   Constant Risk Aversion, the Dual Theory, and the Gini Inequality Index. AU   Safra, Zvi; Segal, Uzi. AA   Safra: Tel Aviv University. Segal: University of Western Ontario. SR   University of Western Ontario Department of Economics Research Reports: 9716; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.sscl.uwo.ca/economics.   PG   35.   PR $10.00 Canadian per paper. JE D30. KW Risk Aversion. Dual Theory. Gini Inequality.

AB Constant risk aversion means that adding the same constant to all outcomes of two distributions, or multiplying all their outcomes by the same positive constant, will not change the preference relation between them. In this paper we prove several representation theorems, where constant risk aversion is combined with some other known axioms to imply specific functional forms. Among other things, we obtain a form of disappointment aversion theory without using the concept of reference point in the axioms, and a form of the rank dependent model without making any reference to the ranking of the outcomes. This axiomatization leads to a natural generalization of the Gini inequality index. Our analysis also establishes a connection between constant risk aversion, Frechet differentiability, and orders of risk aversion.

Sanchez, Isabel

Sanchis, Alicia

Santillan-Fraile, Javier

Sarel, Michael

AB This study develops a cross-section empirical framework to examine the relationship between the macroeconomic environment and trends in income distribution. The macroeconomic variables that are found to be associated with an improvement in income distribution are higher growth rate, higher income level, higher investment rate, real depreciation (especially for low-income countries), and improvement in terms of trade. The estimated significant effects of growth, income, and investment provide evidence that policies designed to promote investment and growth are likely also to contribute to an improvement in income distribution.

Schlag, Karl H.

Schlittgen, Rainer

AB One of the most important parametric nonlinear time series models is the (self exciting) threshold autoregressive model. The TAR model was introduced by Tong/Lim (1980). There are some extensions to this class of models, namely smooth transition threshold autoregressive model. Other nonlinear models like functional auroregressive models can be thought of as generalizations. It is rather often stated that nonlinear models are necessary but there are not such many applications. In fact there exists a gap between the theoretical development of nonlinear time series models and their application. One reason for this gap may be the lack of applicable software and some investigations of the numerical side of these models. The present paper tries to do a step to fill this gap. For this we describe a procedure to implement the fitting process efficiently. Also we report on some difficulties with estimating STAR models and give some advice to overcome the problems. For FAR models it seems to be of help to smooth the observed parametric relationship. Nevertheless, the usefulness of FAR models to recover more complicated functional coefficients from the data is doubted. All programming was done in GAUSS. The programs are available at request from the author.

Schmidt, Klaus M.

AB There is strong evidence that people exploit their bargaining power in competitive markets but not in bilateral bargaining situations. There is also strong evidence that people exploit free-riding opportunities in voluntary cooperation games. Yet, when they are given the opportunity to punish free riders, stable cooperation is maintained although punishment is costly for those who punish. This paper asks whether there is a simple common principle that can explain this puzzling evidence. We show that if a fraction of the people exhibits inequality aversion the puzzles can be resolved.

Schmitz, James A., Jr.

AB In this paper, I estimate the impact on aggregate labor productivity of having government, rather than private industry, produce investment goods. This policy was pursued to varying degrees by Egypt, India, Turkey, among others. The policy has a large impact because there is both a direct effect (on the production function in the investment sector) and a secondary effect (on the economywide capital stock per worker). I

estimate that this policy alone accounted for about one- third of Egypt's aggregate labor productivity gap with the United States during the 1960's.

TI A Gain from Trade: More Research, Less Obstruction.
AU Holmes, Thomas J.; Schmitz, James A., Jr..

TI Explaining Cross-Country Income Differences.
AU McGrattan, Ellen R.; Schmitz, James A., Jr..

Segal, Uzi

TI Constant Risk Aversion, the Dual Theory, and the Gini Inequality Index. AU Safra, Zvi; Segal, Uzi.

TI Coherent Odds and Subjective Probability.
AU Border, Kim C.; Segal, Uzi.

Sengupta, Jati K.

PD March 1997. TI New Efficiency Theory: Extensions and New Applications of Data Envelopment Analysis. AA University of California, Santa Barbara. SR University of California, Santa Barbara, Working Papers in Economics: 06/97; Department of Economics, University of California, Santa Barbara, CA 93106. Website: http://econ.ucsb.edu/. PG 27. PR no charge. JE C14, D24. KW Data Envelopment. Pareto Efficiency.
AB New types of characterization of Pareto efficiency based on data envelopment analysis are extended here in several new directions involving allocative efficiency and stochastic filtering methods.

PD July 1997. TI A Dynamic Efficiency Model Using Data Envelopment Analysis. AA University of California, Santa Barbara. SR University of California, Santa Barbara, Working Papers in Economics: 11/97; Department of Economics, Working Paper Coordinator, University of California, Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. PG 19. PR no charge. JE C14, C61, D24. KW Production Efficiency. Allocative Efficiency. Dynamic Efficiency. Capital Utilization.
AB Dynamic and stochastic extensions of data envelopment analysis are attempted here in order to provide cost efficiency measures in a production framework. Sources of inefficiency in static and myopic models are characterized in terms of time-varying input prices an their fluctuations in terms of price variance.

Serrano, Carlos Garcia

TI New Men and New Women? A Comparison of Paid Work Propensities From a Panel Data Perspective. AU Booth, Alison L.; Serrano, Carlos Garcia; Jenkins, Stephen P.

Servaes, Henri

TI The Cost of Diversity: The Diversification Discount and Inefficient Investment. AU Zingales, Luigi; Rajan, Raghuram G.; Servaes, Henri.

Seymour, Robert M.

TI Evolutionary Stability of Inequality Structures.
AU Ponti, Giovanni B.; Seymour, Robert M.

Shadbegian, Ronald J.

TI Environmental Regulation, Investment Timing, and Technology Choice. AU Gray, Wayne B.; Shadbegian, Ronald J.

Shalev, Jonathan

PD January 1997. TI Loss Aversion and Bargaining. AA Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9706; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 27. PR $100 per year. JE C78. KW Bargaining. Loss Aversion. Reference Dependence.
AB The authors consider bargaining situations where two players evaluate outcomes with reference-dependent utility functions, analyzing the effect of differing levels of loss aversion on bargaining outcomes. They find that, as with risk aversion, increasing loss aversion for a player leads to worse outcomes for that player in bargaining situations. An extension of Nash's axioms is used to define a solution for bargaining problems with exogenous reference points. Using this solution concept the authors endogenize the reference points into the model and find a unique solution giving reference points and outcomes that satisfy two reasonable properties, which they predict would be observed in a steady state. The resulting solution also emerges in two other approaches, a strategic approach using Rubinstein's alternating offers model and a dynamic approach in which the authors find that even under weak assumptions, outcomes and reference points converge to the steady state solution from any non-equilibrium state.

PD March 1997. TI Loss Aversion Equilibrium. AA Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9723; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 21. PR $100 per year. JE C72. KW Loss Aversion. Reference Dependence. Equilibrium. Strategic Form. Game Theory.
AB The Nash equilibrium solution concept for strategic form games is based on the assumption of expected utility maximization. Reference dependent utility functions (in which utility is determined not only by an outcome, but also by the relationship of the outcome to a reference point) are a better predictor of behavior than expected utility. In particular, loss aversion is an important element of such utility functions. We extend strategic form games to include loss aversion characteristics of the players. We define loss-aversion equilibrium, a solution concept endogenizing reference points. Reference points emerge as expressions of anticipation which are fulfilled in equilibrium. We show existence of loss-aversion equilibrium for any extended game, and compare it to Nash equilibrium. Comparative statics show that an increase in loss aversion of one player can affect his and other players' payoffs in different directions.

Shea, John

PD May 1997. TI Does Parents' Money Matter? AA University of Maryland and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6026; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 29. PR $5.00. JE J13, J24, J62, O15. KW Labor Studies. Human Capital. Parental Income. Children.
AB This paper asks whether parental income per se has a positive impact on children's human capital accumulation.

Previous research has established that income is positively correlated across generations. This does not prove that parents' money matters, however, since income is presumably correlated with unobserved abilities transmitted across generations. This paper estimates the impact of parental income by focusing on variation due to parental factors -- union, industry, and job loss experience -- that arguably represent luck. When the author examines a nationally representative sample, he finds that changes in parental income due to luck have at best a negligible impact on children's human capital. On the other hand, the author finds that parental income does matter in a sample of low income families. These findings are potentially consistent with models in which credit market imperfections constrain low income households to make suboptimal investments in their children.

Shiller, Robert J.

PD May 1998. TI Moral Hazard in Home Equity Conversation. AU Shiller, Robert J.; Weiss, Allan N. AA Yale University. SR Yale Cowles Foundation Discussion Paper: 1177; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. PG 26. PR no charge up to 3 papers; $3.00 domestic; 4.00 International. JE R31. KW Mortgages. Home Equity Insurance. Housing Partnerships. Moral Hazard. Real Estate. Price Indices. Home Maintenance. Home Improvements.
AB Home equity conversion as presently constituted or proposed usually does not deal well with the potential problem of moral hazard. Once homeowners know that the risk of poor market performance of their homes is borne by investors, they have an incentive to neglect to take steps to maintain the homes' values. They may thus create serious future losses for the investors. A calibrated model for assessing this moral hazard risk is presented that is suitable for a number of home equity conversion forms: 1) reverse mortgages, 2) home equity insurance, 3) shared appreciation mortgages, 4) housing partnerships, 5) shared equity mortgages and 6) sale of remainder interest. Modifications of these forms involving real estate price indices are proposed that might deal better with the proposed that might deal better with the problem of moral hazard.

PD May 1998. TI Designing Indexed Units of Account. AA Yale University. SR Yale Cowles Foundation Discussion Paper: 1179; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. PG 31. PR no charge up to 3 papers; $3.00 domestic; 4.00 International. JE E42. KW Indexation. Escalator Clause. Base Income. Money Illusion. Sticky Prices. Fairness.
AB An indexed unit of account is a unit of measurement defined using an index such as a consumer price index so that prices, wages or deferred payments defined in terms of these units will automatically adjust to changing economic conditions. Evidence on money illusion and sticky prices, and evidence from countries (notably Chile) that have created indexed units of account, suggests that creating such indexed units is an important policy option for governments in countries with unstable prices or incomes. Choices for governments designing indexed units of account are discussed. Governments may choose to encourage the use of the units only for large long-deferred non-wage payments, or they may choose to go to the opposite extreme of encouraging the use of the units for defining all prices, wages and payments. A general equilibrium model is given that shows the dynamics of prices when all

prices are expressed in the units. Governments may choose to link units to a consumer price index or to a per capita income index, and there may be advantages to creating both kinds of units simultaneously. Downward rigidity of real wages might be reduced if wages are denominated in base-income-indexed units of account, where base income is defined so that the growth rate in money value of the unit is biased down relative to actual per capita income growth.

PD July 1998. TI Social Security and Institutions for Intergenerational, Intragenerational and International Risk Sharing. AA Yale University. SR Yale Cowles Foundation Discussion Paper: 1185; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. PG 36. PR no charge up to 3 papers; $3.00 domestic; 4.00 International. JE H55. KW Insurance. Pensions. Risk Management. Hedging. Social Security. Trust Fund. Overlapping Generations.
AB Social security system old age insurance systems are devices for the sharing of income risks of elderly people with others. Risks can be shared intergenerationally (with the young of the same country), intragenerationally (with other elderly of the same country) or internationally (with foreigners). Barriers to individuals themselves sharing their risks intergenerationally, intragenerationally or internationally are described. Optimal design of government-sponsored social security systems is considered in light of these barriers. Alternative benefits and contributions formulas for pay-as-you-go social security systems are defined and compared with existing and proposed formulas in terms of their ability to fulfill the government's role in promoting risk sharing. Benefits for each retired person may be tied to that person's lifetime income without causing (as with the U.S. benefits formula today) aggregate benefits for all elderly today to be tied to their past aggregate income.

Shimoji, Makoto

PD July 1997. TI Conditional Dominance, Rationalizability, and Game Forms. AU Shimoji, Makoto; Watson, Joel. AA University of California, San Diego. SR University of California, San Diego, Department of Economics Working Paper: 97/16; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG 22. PR $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. JE C72. KW Extensive Form Games. Normal Form Games. Solution Concepts.
AB We propose a notion of conditional dominance and we investigate several versions of rationalizability and conditional dominance for general games. Among other results, we prove: (1) an equivalence result for conditional dominance and extensive form rationalizability, (2) that "consistency" is dispensable in the definition of rationalizability for extensive form games, and (3) results on the equivalence of solutions when applied to different representations of a game.

Shkolnik, Jamie L.

TI The Effects of Ability Grouping on Student Math Achievement and Resource Allocation in Secondary Schools. AU Betts, Julian R.; Shkolnik, Jamie L.

Shubik, Martin

PD March 1998. TI Some Simple Games for Teaching

and Research Part 1: Cooperative Games. AA Yale University. SR Yale Cowles Foundation Discussion Paper: 1174; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. PG 17. PR no charge up to 3 papers; $3.00 domestic; 4.00 International. JE C71, C92. KW Cooperative Games. Core. Experimental Games.
AB Over many years some simple cooperative games have been considered in lectures on game theory. The games were selected in order to provide insight into various normative theories of solution to n-person games. It is suggested that the results indicate that when solutions have outcomes in common, predictability is higher than when they are apart. The core is attractive but less so when it is heavily nonsymmetric.

PD May 1998. TI Game Theory, Complexity and Simplicity Part III: Critique and Prospective. AA Yale University. SR Yale Cowles Foundation Discussion Paper: 1184; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. PG 26. PR no charge up to 3 papers; $3.00 domestic; 4.00 International. JE C71, C72, C73, C78. KW Game Theory. Solutions. Complexity. Dynamics.
AB A discussion of some of the problems in the utilization of game theoretic solution concepts is given. It is suggested that a considerable broadening of solution concepts is called for to take into account sufficient context. Mass agent simulations appear to offer promise for some economic and societal problems.

TI A Strategic Market Game With Active Bankruptcy. AU Geanakoplos, John; Karatzas, I.; Shubik, Martin; Sudderth, W.

Shy, Oz
TI Price Competition When Consumer Behavior is Characterized By Conformity or Vanity. AU Grilo, Isabel; Shy, Oz; Thisse, Jacques-Francois.

Sickles, Robin C.
TI Capacity and Product Market Competition: Measuring Market Power in a "Fat-Cat" Industry. AU Roller, Lars-Hendrik; Sickles, Robin C.

Sicsic, Pierre
PD February 1998. TI Threat of a Capital Levy, Expected Devaluation and Interest Rates in Inter-War France. AU Sicsic, Pierre; Hautcoeur, Pierre-Cyrille. AA Sicsic: Banque de France. Hautcoeur: DELTA. SR Centre for Economic Policy Research Discussion Paper: 1824; 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 E42, E43, F31, N14, N24. KW Exchange Rates. Interest Rates. Taxation. France. Expectations.
AB The aim of this paper is to isolate and measure the respective importance of political and economic aspects in two critical episodes of the French inter-war period: the stabilization process of the mid-1920's and the reluctance to abandon the gold standard during the 1930's. The authors do this by separating expectations of taxation and of devaluation that are implicitly included in the prices of various categories of French bonds. On the 1924-6 crisis, they show first that there was no expectation of government default; second that a substantial part of the high level of interest rates in 1925 can be explained by expectations of a capital levy or other taxation devices; third that hyperinflation was not expected. For the 1930's, the authors show that expectations of a depreciation of the franc explain the rise in interest rates, so that no independent effect of fiscal policy was expected.

Simar, Leopold
TI On Estimation of Monotone and Concave Frontier Functions. AU Gijbels, Irene; Mammen, Enno; Park, Byeong U.; Simar, Leopold.

Sinclair, P. J. N.
TI A Model of Flexibility and Production Phase Specialization. AU De Propris, Lisa; Sinclair, P. J. N.
TI Quality of Exports and Taste Bias: A New Approach. AU Martinez-Zarzoso, Inmaculada; Sinclair, P. J. N.

Singer, Miroslav
TI Enterprise Break-Ups and Performance During the Transition. AU Lizal, Lubomir; Singer, Miroslav; Svejnar, Jan.

Sjostrom, Tomas
TI Moral Hazard and Overlapping Generations With Endogenous Occupational Choice. AU Ghatak, Maithreesh; Morelli, Massimo; Sjostrom, Tomas.

Skinner, Jonathan
TI The Incidence of Medicare. AU McClellan, Mark; Skinner, Jonathan.

Slater, J. R.
TI The Impact of FDI and Regional Economic Integration on the Economic Growth of the ASEAN-5 Economies, 1970-1994: A Comparative Analysis from a Small Structural Model. AU Bende-Nabende, A.; Ford, J. L.; Slater, J. R.
TI The Impact of FDI on the Economic Growth of the ASEAN-5 Economies, 1970-94: A Comparative Dynamic Multiplier Analysis from a Small Model with Emphasis on Liberalisation. AU Bende-Nabende, A.; Ford, J. L.; Slater, J. R.

Slivinski, Al
TI Rational Nonprofit Entrepreneurship. AU Bilodeau, Marc; Slivinski, Al.

Sloek, Torsten
TI The Real Effects of Monetary Policy in the European Union: What Are the Differences? AU Ramaswamy, Ramana; Sloek, Torsten.

Smeers, Yves
PD February 1997. TI Spatially Oligopolistic Model With Opportunity Cost Pricing for Transmission Capacity Reservations -- A Variational Inequality Approach. AU Smeers, Yves; Jing-Yuan, Wei. AA Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9717; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 24. PR $100

per year. **JE** D43, L12, L13, L51, L94. **KW** Oligopoly. Electricity. Natural Monopoly. Regulation.
AB Two markets co-exist in an unbundled electricity supply industry: the one of the electricity supply and the one of transmission capacity reservations. The first one could be assumed as an oligopoly, and the second one, as a natural monopoly, is regulated. The prices in the first market are determined by an oligopolistic equilibrium. The prices in the second market are set equal to the opportunity costs. The strong interaction of the behavior of the two markets requires a new concept of equilibrium. In this equilibrium, the two markets must be simultaneously in their own equilibrium: Nash equilibrium in the first market and market-clearing equilibrium in the second. An equilibrium of the market is defined and variational inequality approach is used to solve the problem. A simulation using this model is done for an electricity supply market organized across 4 European countries.

PD April 1997. **TI** Spatially Oligopolistic Model With Nodal Opportunity Cost Pricing for Transmission Capacity Reservations. **AU** Smeers, Yves; Wei, Jing-Yuan. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9726; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 13. **PR** $100 per year. **JE** D43, L12, L13, L51, L94. **KW** Oligopoly. Electricity. Natural Monopoly. Regulation.
AB Two markets co-exist in an unbundled electricity supply industry: the one of the electricity supply and the one of transmission capacity reservations. The first one could be assumed as an oligopoly, and the second one, as a natural monopoly, is regulated. The prices in the first market are determined by an oligopolistic equilibrium. The prices in the second market are set equal to opportunity costs. The strong interaction of the behavior of the two markets requires a new concept of equilibrium. In this equilibrium, the two markets must be simultaneously in their own equilibrium: Nash equilibrium in the first market and market-clearing equilibrium in the second. A 3-bus example is presented to show the main result of the model.

PD May 1997. **TI** Competition in Both Quantity and Quality: Spatial Competition Models With Regulated Transportation Prices. **AU** Smeers, Yves; Wei, Jing-Yuan. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9739; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 27. **PR** $100 per year. **JE** D43, L13, L15, L94. **KW** Oligopoly. Quality. Reliability. Electricity. Spatial Dispersion.
AB An oligopoly with spatially dispersed producers and consumers and with multi-period demands is modeled in the paper. Generation firms compete both in quantity and in quality for electricity supply as well as in reserved capacity demanded by consumers for reliability. Two models are formulated under the following underlying assumptions on oligopolistic competition: (1) Ramsey model; (2) the producers are assumed to behave in the Cournot manner with regulated transportation prices. Variational inequality approach is used for computing equilibria of the model. These models are applied to simulate the long run electricity market.

Smets, Frank
PD December 1997. **TI** Why Does the Yield Curve Predict Economic Activity? Dissecting the Evidence for Germany and the United States. **AU** Smets, Frank; Tsatsaronis, Kostas. **AA** Bank for International Settlements. **SR** Centre for Economic Policy Research Discussion Paper: 1758; 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** E32, E43, E44, E58. **KW** Term Structure. Interest Rates. Information Content. Monetary Policy. Germany.
AB This paper investigates why the slope of the yield curve predicts future economic activity in Germany and the United States. A structural VAR is used to identify aggregate supply, aggregate demand, monetary policy and inflation scare shocks and to analyze their effects on the real, nominal and term premium components of the term spread and on output. In both countries demand and monetary policy shocks contribute to the covariance between output growth and the lagged term spread, while inflation scares do not. As the latter are more important in the United States, they reduce the predictive content of the term spread in that country. However, the main reason for the stronger leading indicator property in Germany is the positive contribution of supply shocks, which owing to a different monetary policy response explains about half of the positive covariance at lag four in Germany and almost nothing in the United States.

Smith, James L.
TI The Structure and Contributions of Relational Contracts: Theory and Evidence from Oil and Gas Unit Operating Agreements. **AU** Libecap, Gary D.; Smith, James L..

Smith, Jeffrey
TI College Quality and the Wages of Young Men. **AU** Daniel, Kermit; Black, Dan; Smith, Jeffrey.

Smith, Lones
TI Wald Revisited: The Optimal Level of Experimentation. **AU** Moscarini, Giuseppe; Smith, Lones.

Snower, Dennis J.
TI The Division of Labour Within Firms. **AU** Lindbeck, Assar; Snower, Dennis J.

TI How Labour Market Flexibility Affects Unemployment: Long-Term Implications of the Chain Reaction Theory. **AU** Karanassou, Marika; Snower, Dennis J.

Sobel, Joel
PD July 1997. **TI** On the Dynamics of Standards. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 97/15; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. **PG** 33. **PR** $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. **JE** D71, J30, J44. **KW** Standards. Promotions. Committees.
AB This paper studies the dynamics of standards in a two-parameter family of promotion models. It provides a framework with which one can judge whether an institution will maintain

its quality over time. The model contains three types of agent: candidates, elites, and judges. Candidates aspire to be promoted. They choose a characteristic (level of effort or accomplishment). Elites are people who have been promoted in the past. Judges observe the characteristic of candidates, compare it to members of the elite, and decide whether candidates should be promoted. Promotion requires that at least n of the N judges think that the candidate is at least as good as r of the R current group of elites. Candidates minimize the cost of acquiring a D dimensional characteristic subject to being able to satisfy the promotion criterion. When candidates must specialize in one characteristic, I demonstrate that standards decline over time if $n/N < 1/D$; and standards increase if $n/N > (D-1)/D$. If the population of promoted agents must contain a fixed number of agents specializing in each dimension, then standards decline if $n/N < r/D$; standards rise if $n/N > (D-r)/D$. I argue that these results provide insight into the kinds of promotion rules that maintain quality of organizations.

PD   July 1997. TI   A Model of Declining Standards. AA   University of California, San Diego. SR   University of California, San Diego, Department of Economics Working Paper: 97/18; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG   12. PR $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. JE   D71, J30, J44. KW   Standards. Promotions. Committees.
AB   I present a model in which relative standing determines the level of achievement needed to pass a test. A candidate passes a test (or gains the credential) provided that his performance compares favorably to people who have passed the test recently. I argue that standards are likely to decline under such a system. There are three kinds of agents in the model. Candidates wish to pass a test, obtain a promotion, or gain a credential. Members of the elite are people who have already passed the test. The judge decides who passes. In order to pass, a candidate's performance must be at least as good as the performance of a representative member of the elite. Candidates choose the least expensive effort level that will enable them to pass. Without perturbations in the underlying data (in this case, the preferences of the judge), the model predicts that standards will not change. Perturbations in the preferences used to judge candidates systematically lead to a reduction in standards.

PD   October 1997. TI   A Re-Examination of Yardstick Competition. AA   University of California, San Diego. SR   University of California, San Diego, Department of Economics Working Paper: 97/25; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG   17. PR $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. JE   D82, L51. KW   Regulation.   Yardstick   Competition.   Relative Performance.
AB   I observe that yardstick competition does not assist a regulator when lump-sum transfers are not costly and the regulator does not care about the distribution of income. Yardstick competition discourages investment that would make efficient operation possible. I characterize optimal regulatory schemes in a simple model and demonstrate that it is generally optimal to limit the amount of information available to the regulator.

Soderlind, Paul
PD   March 1998. TI   Extracting Expectations About 1992 UK Monetary Policy From Option Prices. AA   University of Stockholm. SR   Centre for Economic Policy Research Discussion Paper: 1823; 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   E31, E43, E52, F31, G13. KW   Interest Rates. Exchange Rates. Futures. Options. Risk Neutrality.
AB   The UK pound left the ERM on 16 September 1992 after a period of turbulence. UK monetary policy soon shifted to lower short-term interest rates and an inflation target was announced. This paper uses daily option prices to estimate how the market's probability distribution of the future Deutsche mark/sterling exchange rate and UK and German interest rates changed over the summer and autumn of 1992. The results show, among other things, how various policy decisions affected the market's assessment of the probabilities of realignments and lending rate cuts.

Sorsa, Piritta
PD   December 1997. TI   Regional Integration and Baltic Trade and Investment Performance. AA   International Monetary Fund. SR   International Monetary Fund Working Paper: WP/97/167; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG   41. PR   not available. JE   F13, F15. KW   Regional Integration. Baltic Trade. Investment Performance.
AB   This paper analyzes the role of regional arrangements in trade and foreign direct investment (FDI) performance in the Baltics. While progress with transition is a key determinant of trade and FDI performance, regional arrangements with Western Europe have helped develop trade and transfer of technology, but have not yet led to export-related foreign direct investment toward the European Union. The main reasons for this are policy uncertainties, need for more progress with transition, and restrictions in the trade agreements, especially on the European Union side. Intra-Baltic integration has not yet led to substantial trade and FDI growth between the Baltic's.

Spanjers, Willy
TI   Uncertainty in Partnerships.   AU   Kelsey, David; Spanjers, Willy.

Staiger, Douglas
TI   Abortion Legalization and Child Living Circumstances: Who is the "Marginal Child?"   AU   Gruber, Jonathan; Levine, Phillip; Staiger, Douglas.

Steigerwald, Douglas G.
TI   Optimal Policies for Investment with Time-Varying Return Distributions.   AU   Donchev, Doncho S.; Rachev, Svetlosar T.; Steigerwald, Douglas G.

Stone, Mark
PD   March 1998. TI   Financial Infusion and Exiting From a Money Rule.   AA   International Monetary Fund. SR   International Monetary Fund Working Paper: WP/98/31; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG   41. PR   not available. JE   E41, E52, F36. KW   Monetary Policy. Exchange Rates. Money Demand.

Stabilization.
AB Money demand often surges after successful macroeconomic stabilization. This paper gives a name -- financial infusion -- to these surges because their size, unpredictability, and concurrence with other "success shocks" pose unique challenges to policy, especially under a money rule. An examination of 26 stabilization episodes shows that money to GDP can be expected to decline before stabilization and rise sharply thereafter. Analysis of the policy response to financial infusion under a money rule concludes that it amplifies output and price volatility, even if built into the rule. Finally, the main elements of an exit strategy from a money rule to an exchange rate or inflation target are discussed.

Straubhaar, Thomas
PD January 1998. TI Migration to Switzerland: Some New Evidence. AU Straubhaar, Thomas; Golder, Stefan M. AA Straubhaar: Universitat der Bundeswehr. Golder: University of Basel. SR Centre for Economic Policy Research Discussion Paper: 1791; 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 D33, F22, J15, J24, J31. KW Income Distribution. Factor Mobility. International Migration. Labor Productivity. Earnings Assimilation.
AB Switzerland has experienced a substantial influx of immigrants over the 50 years since World War II, to the extent that it now has one of the highest share of foreigners in population among OECD countries. This paper analyzes Switzerland's experience of migration, centering on two main issues: the economic effects of migration and the labor market performance of immigrants. Two main results emerge from our study: first, as a result of shortcomings of the Swiss migration policy, immigrants tend to have a negative impact on the Swiss economy; and second, the analysis of labor market performance shows that there are substantial discrepancies in the performance of immigrants from different countries of origin. Immigrants from North European countries largely outperform immigrants from South European and non-European countries. On the basis of the empirical analysis, this study finally outlines some reform options for Swiss migration policy.

Strauch, Rolf
TI Sustainability of Public Finances. AU Perotti, Roberto; von Hagen, Jurgen; Strauch, Rolf.

Strobel, Frank
PD February 1998. TI International Tax Arbitrage, Currency Options and Put-Call Parity Conditions. AA University of Birmingham. SR University of Birmingham, Department of Economics Discussion Paper: 98/03; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. Website: www.bham.ac.uk/economics. PG 21. PR 2 pounds; no charge to academics. JE F31, F36, G11, G15, H24. KW Arbitrage. Currency. Options. Put-Call. Taxation.
AB Using a finite-horizon general equilibrium model with uncertainty and money, the authors characterize situations where tax arbitrage opportunities may arise for international portfolio investors in an economy with heterogeneous capital income taxation where foreign currency exposure can be hedged using forward contracts and a set of currency options.

The authors obtain tax-modified option prices similar to the no-tax ones, but augmented by tax-induced "risk-premium" terms; tax-modified put-call parity conditions are derived that revert to their standard (no-tax) format if the respective marginal agents in the bond and option markets are in identical tax brackets.

PD February 1998. TI International Tax Arbitrage and Financial Parity Conditions with Preferential Capital Gains Taxation. AA University of Birmingham. SR University of Birmingham, Department of Economics Discussion Paper: 98/04; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. Website: www.bham.ac.uk/economics. PG 17. PR 2 pounds; no charge to academics. JE F31, F36, G11, H24, H29. KW Arbitrage. Taxation. Capital Gains. Interest Parity. International Investment.
AB Using a finite-horizon general equilibrium model with uncertainty and money, the authors characterize situations where tax arbitrage opportunities may arise for international portfolio investors in an economy with heterogeneous capital income taxation when interest income and capital gains/losses are taxed differentially for some agents. The authors derive tax-modified uncovered interest parity conditions, Fisher conditions and forward prices similar to the no-tax ones, but augmented by tax-induced "risk-premium" terms; covered interest parity and Fisher conditions remain unaffected by the introduction of capital income taxes as the authors bound tax-based arbitrage without restricting arbitrage per se.

PD February 1998. TI International Tax Arbitrage, Tax Evasion and Interest Parity Conditions. AA University of Birmingham. SR University of Birmingham, Department of Economics Discussion Paper: 98/05; Department of Economics School of of Social Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom. Website: www.bham.ac.uk/economics. PG 15. PR 2 pounds; no charge to academics. JE F36, G11, G15, H24, H26. KW Arbitrage. International Investment. Taxation. Tax Evasion. Interest Parity.
AB Using a finite-horizon general equilibrium model with uncertainty and money, the authors characterize situations where tax arbitrage opportunities may arise for international portfolio investors in an economy with heterogeneous capital income taxation when there is some scope to evade taxes on foreign capital income. The authors derive tax-modified uncovered interest parity conditions and forward rates similar to the no-tax ones, but augmented by tax-induced "risk-premium" terms; covered interest parity conditions remain unaffected by the introduction of capital income taxes, a consequence of the approach of bounding tax-based arbitrage without restricting arbitrage per se.

Sudderth, W.
TI A Strategic Market Game With Active Bankruptcy. AU Geanakoplos, John; Karatzas, I.; Shubik, Martin; Sudderth, W.

Sun, Yeneng
TI On Loeb Measure Spaces and Their Significance for Non-Cooperative Game Theory. AU Khan, M. Ali; Sun, Yeneng.

TI On the Decomposition and Characterization of Risk. AU Ali Khan, M.; Sun, Yeneng.

Svejnar, Jan
TI Enterprise Break-Ups and Performance During the Transition. AU Lizal, Lubomir; Singer, Miroslav; Svejnar, Jan.

Swedenborg, Birgitta
TI Wage Dispersion and Country Price Levels. AU Lipsey, Robert E.; Swedenborg, Birgitta.

Tabellini, Guido
PD December 1997. TI Political Economics and Macroeconomic Policy. AU Tabellini, Guido; Persson, Torsten. AA Tabellini: Universita di Brescia & IGIER, Universita Bocconi. Persson: Stockholm University, Sweden. SR Centre for Economic Policy Research Discussion Paper: 1759; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 108. PR 5 pounds or $10.00. JE E52, E63, H20, H30, O10. KW Politics. Monetary Policy. Fiscal Policy. Credibility. Budget Deficits.
AB This paper surveys the recent literature on the theory of macroeconomic policy. We study the effect of various incentive constraints on the policy-making process, such as lack of credibility, political opportunism, political ideology, and divided government. The survey is organized in three parts. Part I deals with monetary policy in a simple Phillips curve model, and focuses on credibility, political business cycles, and optimal design of monetary institutions. Part II deals with fiscal policy in a dynamic general equilibrium set up; the main topics covered in this section are credibility of tax policy, and political determinants of budget deficits. Part III studies economic growth in models with endogenous fiscal policy.

Tambakis, Demosthenes N.
PD February 1998. TI Monetary Policy with a Convex Phillips Curve and Asymmetric Loss. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/21; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 28. PR not available. JE E31, E52. KW Monetary Policy. Asymmetric Loss.
AB Recent theoretical and empirical work has cast doubt on the hypothesis of a linear Phillips curve and a symmetric quadratic loss function underlying traditional thinking on monetary policy. This paper analyzes the Barro-Gordon optimal monetary policy problem under alternative loss functions -- including an asymmetric loss function corresponding to the "opportunistic approach" to disinflation -- when the Phillips curve is convex. Numerical simulations are used to compare the implications of the alternative loss functions for equilibrium levels of inflation and unemployment. For parameter estimates relevant to the United States, the symmetric loss function dominates the asymmetric alternative.

Tan, Guofo
TI Equilibria in Networks. AU Hendricks, Ken; Piccione, Michele; Tan, Guofo.

Tanzi, Vito
PD March 1998. TI Taxation and the Household Saving Rate: Evidence From OECD Countries. AU Tanzi, Vito; Zee, Howell H. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/36; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 16. PR not available. JE E21, H20, H31. KW Taxation. Saving Rate.
AB This paper analyzes anew the relationship between taxation and the household saving rate. On the basis of standard savings and tax revenue data from OECD countries, it provides compelling and robust empirical evidence of a powerful impact of taxes on household savings. In particular, income taxes are shown to affect negatively the household saving rate much more than consumption taxes.

Temzelides, Ted
TI Private Money and Reserve Management in a Random Matching Model. AU Cavalcanti, Ricardo de O.; Erosa, Andres; Temzelides, Ted.

Teo, Leslie E.
TI Parametric Distributional Flexibility and Conditional Variance Models With an Application to Hourly Exchange Rates. AU Lye, Jenny N.; Martin, Vance L.; Teo, Leslie E.

Ter-Minassian, Teresa
PD November 1997. TI Decentralization and Macroeconomic Management. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/155; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 16. PR not available. JE H70. KW Decentralization. Fiscal Federalism. Borrowing Controls.
AB The literature on fiscal federalism has amply discussed both the potential efficiency and welfare gains from decentralization and the potential trade-offs between decentralization and income redistribution. By contrast, it has generally put less emphasis on the effects of decentralization on macroeconomic management, although policymakers worldwide increasingly have to grapple with these effects. This paper examines the constraints that a high degree of decentralization can place on the ability of the central government to carry out its traditional macroeconomic management functions and explores various ways to minimize these constraints.

Thacker, Nita
TI Achieving Stabilization in Armenia. AU Horvath, Balazs; Thacker, Nita; Ha, Jiming.

Thimann, Christian
TI Empirical Determinants of Household Saving: Evidence From OECD Countries. AU Callen, Tim; Thimann, Christian.

Thisse, Jacques-Francois
TI Skill Acquisition and Wage Competition With Heterogeneous Workers and Firms. AU Hamilton, Jonathan; Thisse, Jacques-Francois; Zenou, Yves.

TI Local Public Funding of Higher Education When Skilled Labor is Mobile. AU Justman, Moshe; Thisse, Jacques-Francois.

TI Price Competition When Consumer Behavior is Characterized By Conformity or Vanity. AU Grilo, Isabel; Shy, Oz; Thisse, Jacques-Francois.

TI Demand Uncertainty, Mismatch, and (Un)Employment.

AU Jellal, Mohamed; Thisse, Jacques-Francois; Zenou, Yves.

Thomas, Alun
PD December 1997. **TI** Is the Exchange Rate a Shock Absorber? The Case of Sweden. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/176; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 22. **PR** not available. **JE** F30, F31. **KW** Sweden. Exchange Rate.
AB This paper uses a structural vector autoregression representation of the Mundell-Flemming model to analyze the determinants of movements in Sweden's real exchange rate. It finds that, while (supply and demand) shocks account for over 60 percent of the forecast error variance, comparable to several Economic and Monetary Union (EMU) countries, demand shocks account for a higher fraction of these real shocks in Sweden than in those core countries. If real demand shocks result from controllable macroeconomic policies, the cost of relinquishing the exchange rate is no higher, and may be lower, for Sweden than for most core EMU countries.

Thomas, H. R.
TI The Consequences of Drop-Outs on the Cost-Effectiveness of 16-19 Colleges. **AU** Fielding, A.; Belfield, C. R.; Thomas, H. R.

TI An Investigation of Performance and Cost-Effectiveness in GCE A-Level Provision in the FEFC Funded Sector. **AU** Fielding, A.; Belfield, C. R.; Thomas, H. R.

Thorne, Rupert
TI An Econometric Analysis of Countries' Repayment Performance to the International Monetary Fund. **AU** Aylward, Lynn; Thorne, Rupert.

Tobin, James
PD July 1998. **TI** Monetary Policy: Recent Theory and Practice. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1187; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 12. **PR** no charge up to 3 papers; $3.00 domestic; 4.00 International. **JE** E52. **KW** Targets. Instruments. Rules-Discretion.
AB The paper reviews the major developments of the last three decades: the rise and fall of monetarism as theory and as targeting of intermediate monetary aggregates; targeting of nominal GDP in order to escape volatility of velocity of money; the abandonment of intermediate targets as superfluous; the use of money-market interest rates as operating procedure, except in the U.S.; their replacement by reserve aggregates in 1979-82; inflation stability and price level stability as policy objectives, often exclusive of other macroeconomic goals; the U.S. Federal Reserve as aiming successfully at both low inflation and low unemployment, goals mandated by law; the rules-discretion debate; the necessity for rules conditional on economic states and the impossibility of anticipating all circumstances, thus the inevitability of discretion but in the spirit of rules; John Taylor's algebraic rule for the Federal Reserve, relating Federal Funds rate to inflation and unemployment deviation from goals.

PD July 1998. **TI** Financial Globalization: Can National Currencies Survive? **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1188; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT

06520. **PG** 24. **PR** no charge up to 3 papers; $3.00 domestic; 4.00 International. **JE** F31. **KW** Currency Crisis. Monetary Policy. Fixed or Exchange Rates. Capital Movements.
AB Fixed exchange rate, pegs to hard currencies that can be adjusted, are fragile, the more so the more mobile are capital funds across currencies and national markets. Once market participants doubt, for whatever reason, the ability of a developing or emerging economy's central bank to meet its commitment to redeem it currency in hard currency at the promised rate, they will race to claim the country's external reserves. Vulnerability to crises becomes greater as financial markets become less regulated and more internationally open. To escape currency crises, a country may lock its money to that of a reserve- currency country, as by a "currency board." This may, if and only if reserves are ample and all other economic adjectives are subordinated, maintain the peg and hold down inflation. But it sacrifices monetary autonomy and seignorage, leading in effect and perhaps literally to substitution of the reserve currency for the local currency as unit of account and means of payment. When crises hit, the IMF and other lenders give highest priority to restoration of credibility and confidence in the currency under attack. They require the victim country to take drastic restrictive monetary and fiscal measures, whether or not irresponsibility in these policies brought on the crisis.

Toint, Philippe L.
TI Financial Transfers to Ensure Cooperative International Optimality in Stock Pollutant Abatement. **AU** Germain, Marc; Toint, Philippe L.; Tulkens, Henry.

TI An Iterative Process for International Negotiations on Acid Rain in Northern Europe Using a General Convex Formulation **AU** Germain, Marc; Toint, Philippe L.

Tsatsaronis, Kostas
TI Why Does the Yield Curve Predict Economic Activity? Dissecting the Evidence for Germany and the United States. **AU** Smets, Frank; Tsatsaronis, Kostas.

Tulkens, Henry
TI Financial Transfers to Ensure Cooperative International Optimality in Stock Pollutant Abatement. **AU** Germain, Marc; Toint, Philippe L.; Tulkens, Henry.

Turrini, Alessandro
PD January 1997. **TI** Human Capital Formation in an Open Economy With Increasing Wage Differentials. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9707; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 25. **PR** $100 per year. **JE** D72, F10, H52, J24, J31. **KW** Wage Differentials. Human Capital. International Trade. Political Economy.
AB Several developed countries are witnessing a trend towards an increasing gap in the earnings between skilled and unskilled workers. Though it is widely recognized that human capital formation programs through education and training should be strengthened in the presence of increasing wage differentials, it seems that this is not currently occurring to a satisfactory extent. We show an example where technology and

terms of trade shocks that enhance the wage differential between high and low-skilled labor aggravate the underinvestment in public education arising from majority voting, thus leading to an undesirable outcome, both in terms of efficiency and equity.

Ulph, Alistair

PD October 1997. TI Political Institutions and the Design of Environmental Policy in a Federal System with Asymmetric Information. AA University of Southampton. SR University of Southampton Discussion Papers in Economics and Econometrics: 9718; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton SO17 1BJ, England. Website: www.soton.as.uk/discp.html. PG 21. PR on application. JE F15, F42, H70, L51, Q28. KW Environmental Policy. International Trade. Harmonization. Asymmetric Information. Political Economy.
AB Paper presented in the invited paper session on "International Institutions and Environmental Policy" at the European Economic Association Meeting, Toulouse, 30th August--2nd September 1997. I am grateful to Dieter Balkenborg and Surjinder Johal for comments on an earlier version. A shorter version of this paper will be published in the European Economic Review Conference Volume.

TI Product Market Integration and Wages: Evidence From a Cross-Section of Manufacturing Establishments in the United Kingdom. AU Driffill, John; Ulph, Alistair; Meschi, Meloria.

TI Tying Governments' Hands: Why Harmonisation of Environmental Policies May Be Desirable. AU Johal, Surjinder; Ulph, Alistair.

Ursprung, Heinrich W.
TI The King Never Emigrates: Political Culture and the Reluctant International Movement of People. AU Epstein, Gil S.; Hillman, Arye L.; Ursprung, Heinrich W.

Utili, Francesca
TI The Italian Labor Market: Stylized Facts, Institutions, and Directions for Reform. AU Prasad, Eswar S.; Utili, Francesca.

Valdes, Rodrigo O.
TI Are Currency Crises Predictable? AU Goldfajn, Ilan; Valdes, Rodrigo O.

Valentinyi, Akos
TI Interactive Contagion. AU Lee, In Ho; Valentinyi, Akos.

TI Ruling Out Indeterminacy: The Role of Heterogeneity. AU Herrendorf, Berthold; Valentinyi, Akos; Waldmann, Robert.

Valles, Javier
TI Monetary Policy and Exchange Rate Dynamics in the Spanish Economy. AU Andres, Javier; Mestre, Ricardo; Valles, Javier.

Vamvakidis, Athanasios
PD January 1998. TI Developing Countries and the Feldstein-Horioka Puzzle. AU Vamvakidis, Athanasios;

Wacziarg, Romain. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/02; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 24. PR not available. JE F36. KW Financial Integration. Emerging Markets.
AB The previous literature points to a high correlation between domestic rates of investment and savings among OECD countries. Some take this as evidence of limited financial integration in the industrialized world. This paper presents new empirical results, bases on an extended sample of countries. The correlation coefficient in a regression of the rate of domestic investment on the rate of domestic savings is statistically insignificant most of the time and generally smaller than 0.3 for any sample other than the OECD. This finding is robust with respect to alternative time periods, subsample and estimation methods. In particular, we control for measurement error, business cycle effects, and country-specific fixed effects.

PD March 1998. TI Regional Trade Agreements Versus Broad Liberalization: Which Path Leads to Faster Growth? Time-Series Evidence. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/98/40; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 34. PR not available. JE F43. KW Economic Growth. Open Economics.
AB Should a closed economy open its trade to all countries or limit itself to participation in regional trade agreements (RTA's)? Based on time-series evidence for a data set for 1950-92, this paper estimates and compares the growth performance of countries that liberalized broadly and those that joined an RTA. The comparisons show that economies grew faster after broad liberalization, both in the short and long run, but slower after participation in an RTA. Economies also had higher investment shares after broad liberalization, but lower ones after joining an RTA. The policy implications support broad liberalization.

van Rixtel, Adrian A. R. J. M.
PD January 1998. TI Monitoring the Monitors: Amakudari and the Ex-Post Monitoring of Private Banks. AU van Rixtel, Adrian A. R. J. M.; Hassink, Wolter H. J. AA van Rixtel: Netherlands Central Bank. Hassink: Utrecht University. SR Centre for Economic Policy Research Discussion Paper: 1785; 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 E58, G21, G38. KW Prudential Policy. Amakudari. Corporate Governance. Monitoring. Banking.
AB The paper investigates whether the Japanese monetary authorities use post-retirement employment of Ministry of Finance (MoF) and Bank of Japan (BoJ) officials as a policy instrument. The authors also investigate whether industrial groupings (keiretsu) and main banks have monitoring functions. They find that MoF and BoJ retirees do move into banks that perform badly in terms of profitability. Furthermore, the paper concludes that the movement of these retirees into the boards of private banks is positively related to specific main bank relationships. The hypothesis of monitoring by keiretsu is rejected, however. Finally, the paper finds that MoF/BoJ amakudari appointments have a positive impact on the development of lending to risky industries. In particular, this latter finding casts doubts on the credibility of the hypothesis that amakudari is used as an instrument of prudential policy.

Vanden Eeckaut, Philippe
TI Estimating Returns to Scale Using Nonparametric Deterministic Technologies: A New Method Based on Goodness-of-Fit. AU Kerstens, Kristiaan; Vanden Eeckaut, Philippe.

Vannetelbosch, Vincent J.
TI Refinements of Rationalizability for Normal-Form Games. AU Herings, P. Jean-Jacques; Vannetelbosch, Vincent J.

TI The Equivalence of the Dekel-Fudenberg Iterative Procedure and Weakly Perfect Rationalizability. AU Herings, P. Jean-Jacques; Vannetelbosch, Vincent J.

Veestraeten, Dirk
TI Stochastic Process Switching and Stage III of EMU. AU De Grauwe, Paul; Dewachter, Hans; Veestraeten, Dirk.

Venables, Anthony J.
TI Agglomeration and Economic Development: Import Substitution Versus Trade Liberalization. AU Puga, Diego; Venables, Anthony J.

Ventura, Gustavo
PD November 1997. TI Flat Tax Reform: A Quantitative Exploration. AA University of Western Ontario. SR University of Western Ontario Department of Economics Research Reports: 9706; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.sscl.uwo.ca/economics. PG 48. PR $10.00 Canadian per paper. JE E62, H20. KW Flat Tax. Dynamic General Equilibrium. Heterogeneous Agents.
AB This paper explores quantitatively the general equilibrium implications of a revenue neutral tax reform in which the current income and capital income tax structure in the U.S. is replaced by a flat tax, as proposed by Hall and Rabushka (1995). The central aspects of such reform, the impact of tax reform on capital accumulation, labor supply and welfare, as well as its distributional consequences, are analyzed in a dynamic general equilibrium model where key features of the actual tax code are modeled. The main results are that, i) the elimination of the actual taxation of capital income has an important and positive effect on capital accumulation; ii) mean labor hours typically decrease in the cases considered, but aggregate labor in efficiency units increases; iii) in all circumstances analyzed, the distributions of earnings, income and especially wealth become more concentrated; iv) in some cases, despite significant aggregate welfare gains, not all households benefit from tax reform.

TI On the Distributional Effects of Social Security Reform. AU Huggett, Mark; Ventura, Gustavo.

Verhoeven, Marijn
TI The Efficiency of Government Expenditure: Experiences From Africa. AU Gupta, Sanjeev; Honjo, Keiko; Verhoeven, Marijn.

Vidal, Jean-Pierre
TI Intergenerational Altruism and the Environment. AU Jouvet, Pierre-Andre; Michel, Philippe; Vidal, Jean-Pierre.

Vinals, Jose
TI A Cost-Benefit Analysis of Going From Low Inflation to Price Stability in Spain. AU Dolado, Juan J.; Gonzalez-Paramo, Jose M.; Vinals, Jose.

PD February 1998. TI Monetary Policy and Inflation: From Theory to Practice. AA Banco de Espana. SR Centre for Economic Policy Research Discussion Paper: 1821; 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 E31, E42, E52, E58. KW Monetary Policy. Inflation. Price Stability. Economic Costs.
AB This paper addresses a number of questions which are essential to a proper understanding of the causes and effects of the inflationary process and to an assessment of the contribution of monetary policy to the achievement of long-term price stability. These questions are: (1) what are the economic costs of inflation? (2) what part does monetary policy play in the short- and medium-term evolution of inflation? (3) what are the most appropriate monetary policy strategies for fighting inflation?.

PD July 1998. TI The Retreat of Inflation and the Making of Monetary Policy: Where do we Stand? AA Banco de Espana. SR Banco de Espana, Servicio de Estudios, Documento de Trabajo: 9813; Banco de Espana, Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala 50, 28104 Madrid, Spain. Website: www.bde.es. PG 30. PR Single copy 430 pesetas; annual subscription 10,000 pesetas; payment accepted only in Spanish currency. JE E31, E52, E58. KW Inflation. Monetary Policy. Central Banks.
AB This document contains the text of the 1998 Central Banking Lecture delivered at the London School of Economics and Political Science on June 4th. It starts by asking what factors have been behind the remarkable retreat of inflation that has taken place internationally since the mid-eighties, then goes on to examine the contribution of monetary policy to this process, and concludes by commenting on what can be learned from central banks recent experience in seeking out alternative anti-inflationary monetary strategies.

Vives, Xavier
TI The Sources of Irish Growth. AU de la Fuente, Angel; Vives, Xavier.

PD December 1997. TI Strategic Behaviour and Price Discovery. AU Vives, Xavier; Medrano, Luis Angel. AA Vives: Institut d'Analisi Economica. Medrano: Universitat Pompeu Fabra. SR Centre for Economic Policy Research Discussion Paper: 1768; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7DB, United Kingdom. Website: www.cepr.demon.co.uk. PG 68. PR 5 pounds or $10.00. JE D82, G12, G14. KW Contrarian Behavior. Preopening Auction. Information Tatonnement. Market Microstructure. Insider Trading.
AB The paper analyzes the effects of strategic behavior by an insider in a price discovery process, akin to an information tatonnement, in the presence of a competitive informed sector. Such processes are used in the pre-opening period of continuous trading systems in several exchanges. It is found that the insider manipulates the market using a contrarian

strategy in order to neutralize the effect of the trades of competitive informed agents. Furthermore, consistent with the empirical evidence available, the authors find that information revelation accelerates close to the opening; that the market price does not converge to the fundamental value no matter how many rounds the tatonnement has; and that the expected trading volume displays a U- shaped pattern. The authors also find that a market with a larger competitive sector has an improved informational efficiency and an increased trading volume. The insider provides a public good for the competitive informed sector.

von Hagen, Jurgen
TI   Sustainability of Public Finances. AU   Perotti, Roberto; von Hagen, Jurgen; Strauch, Rolf.

von Weizsacker, Robert K.
PD   February 1998. TI   Risk, Resources and Education. AU   von Weizsacker, Robert K.; Wigger, Berthold U. AA   von Weizsacker: University of Halle-Witte and University of Mannheim. Wigger: University of Mannheim. SR   Centre for Economic Policy Research Discussion Paper: 1808; 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   D81, H52, I22. KW   Public Education. Tuition Fees. Choice. Uncertainty.
AB   The paper develops a public education scheme that takes uncertainty aspects of private educational investments explicitly into account. A case is made for tuition fees, which depend on expected return on investments in education. The consideration of uncertainty provides a neglected link between educational choice, resource endowment and productivity growth, that may serve to redefine the public role of education financing.

Vyborna, Olga
TI   Fact-Finding Efficiency in Legal Procedure: An Experimental Comparison of Adversarial Versus Inquisitorial Regimes. AU   Block, Michael; Parker, Jeffrey S.; Vyborna, Olga; Dusek, Libor.

Wacziarg, Romain
TI   Openness, Country Size and the Government. AU   Alesina, Alberto; Wacziarg, Romain.

TI   Developing Countries and the Feldstein-Horioka Puzzle. AU   Vamvakidis, Athanasios; Wacziarg, Romain.

Waldmann, Robert
TI   Ruling Out Indeterminacy: The Role of Heterogeneity. AU   Herrendorf, Berthold; Valentinyi, Akos; Waldmann, Robert.

Wall, Howard J.
PD   December 1997. TI   The British Beveridge Curve: A Tale of Ten Regions. AU   Wall, Howard J.; Zoega, Gylfi. AA   Birkbeck College. SR   Centre for Economic Policy Research Discussion Paper: 1771; 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   E32, J63, J64. KW   Unemployment. Vacancies. Beveridge Curve. Business Cycles.

AB   This paper uses county-level data to estimate the timing and magnitude of shifts in aggregate and regional British Beveridge curves. We find that these shifts coincide with the business cycle rather than with hysteresis effects or with changes in regional mismatch. This implies that the Beveridge curve is a flawed device for separating the effects of structural changes from those of the business cycle.

Watson, Joel
TI   Conditional Dominance, Rationalizability, and Game Forms. AU   Shimoji, Makoto; Watson, Joel.

PD   July 1997. TI   Starting Small and Renegotiation. AA   University of California, San Diego. SR   University of California, San Diego, Department of Economics Working Paper: 97/17; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: weber.ucsd.edu/Depts/Econ/Wpapers. PG   29. PR $3.00 U.S. and Canada; $7.00 Foreign; make checks payable to Regents, University of California. JE   C73, C78, D82. KW   Long-Term Relationships. Building Trust. Incomplete Information. Asymmetric Information.
AB   This paper develops a model of a long-term partnership with two-sided incomplete information. The partners jointly determine the stakes of their relationship and individually decide whether to cooperate with or betray each other over time. An equilibrium in which the partners "start small" is studied and shown to be uniquely selected by a strong renegotiation condition. The characterization offers new insights on how relationships change as parties learn about each other and on qualitative differences between situations of one- and two-sided incomplete information. In particular, stakes rise and types separate faster in the two-sided case. The equilibrium is shown to have other intuitive properties as well.

TI   Job Destruction and Propagation of Shocks. AU   Den Haan, Wouter J.; Ramey, Garey; Watson, Joel.

TI   Contractual Intermediaries. AU   Ramey, Garey; Watson, Joel.

Watts, Christophe
PD   April 1997. TI   The Optimal Level of Regulatory Commitment. AA   University of Southampton. SR   University of Southampton Discussion Papers in Economics and Econometrics: 9705; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: www.soton.as.uk/discp.html. PG   22. PR   on application. JE   D82, L12, L51. KW   Regulation. Discretion. Commitment. Incomplete Contracts. Monopoly.
AB   The authors examine the relative benefits of regulatory commitment and discretion arising from the incompleteness of contracts. Full commitment gives strong incentives for investment, but leaves the regulator unable to bring prices in line with costs or gives the firm large rents. Full discretion on the other hand offers no incentive to invest, but achieves allocative efficiency. The authors consider a monopoly firm with known demand but unknown costs and show that the elasticity of demand, the cost of investment, the weight on profits and the level of uncertainty are important factors in determining the optimal level of commitment.

Wauthy, Xavier

PD January 1997. TI Compensating Wage Differentials, Workers' Heterogeneity and Imperfect Competition in the Labor Market. AU Wauthy, Xavier; Zenou, Yves. AA Wauthy: Universite Catholique de Louvain. Zenou: Universite Catholique de Louvain and Universite de Paris-Assas. SR Universite Catholique de Louvain CORE Discussion Paper: 9705; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 14. PR $100 per year. JE J23, J31, J41, J64, L13. KW Labor Market. Worker Characteristics. Wage Setting. Unemployment.

AB In this paper, the authors explore a simple model which focuses on the joint role of workers' heterogeneity and imperfect competition in the endogenous formation of labor market equilibria. They show that, compared to the competitive case, imperfect competition leads to a misallocation of workers and to an increase of the level of unemployment when the population is heterogeneous. When workers are all identical, competitive and Nash allocations become the same.

TI Competing With Second-Hand Products When Consumers Differ in Risk Aversion. AU Grilo, Isabel; Wauthy, Xavier.

Wei, Jing-Yuan

TI Spatially Oligopolistic Model With Nodal Opportunity Cost Pricing for Transmission Capacity Reservations. AU Smeers, Yves; Wei, Jing-Yuan.

TI Competition in Both Quantity and Quality: Spatial Competition Models With Regulated Transportation Prices. AU Smeers, Yves; Wei, Jing-Yuan.

Wei, Shang-Jin

PD May 1997. TI How Taxing is Corruption on International Investors? AA Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6030; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 30. PR $5.00. JE F15, F21, F23, H20, H32. KW International Finance. International Trade. Investment. Corruption. Taxation.

AB This paper studies the effect of corruption on foreign direct investment. The sample covers bilateral investment from fourteen source countries to forty-five host countries during 1990-91. There are three central findings. (1) A rise in either the tax rate on multinational firms or the corruption level in a host country reduces inward foreign direct investment (FDI). An increase in the corruption level from that of Singapore to that of Mexico is equivalent to raising the tax rate by over twenty percent. (2) There is no support for the hypothesis that corruption has a smaller effect on FDI into East Asian host countries. (3) American investors are averse to corruption in host countries, but not necessarily more so than average OECD investors, in spite of the U.S. Foreign Corrupt Practices Act of 1977. There is some weak support for the hypothesis that Japanese investors may be somewhat less sensitive to corruption.

TI Open Regionalism in a World of Continental Trade Blocs. AU Frankel, Jeffrey; Wei, Shang-Jin.

Weiss, Allan N.

TI Moral Hazard in Home Equity Conversation. AU Shiller, Robert J.; Weiss, Allan N.

Weiss, Avi

TI Creating Illegal Immigrants. AU Epstein, Gil S.; Hillman, Arye L.; Weiss, Avi.

White, Halbert L.

TI Improved Rates and Asymptotic Normality for Nonparametric Neural Network Estimators. AU Chen, Xiaohong; White, Halbert L.

Wigger, Berthold U.

TI Risk, Resources and Education. AU von Weizsacker, Robert K.; Wigger, Berthold U.

Williams, Iestyn

TI Incomplete Contracts, Vertical Integration and Product Market Competition. AU Halonen, Maija; Williams, Iestyn.

Williams, Joy

TI Using Continuous Nonlinear Relaxations to Solve Constrained Maximum- Entrophy Sampling Problems. AU Anstreicher, Kurt M.; Fampa, Marcia; Lee, Jon; Williams, Joy.

Williams, Nicolas

TI Do Wages Rise With Job Seniority? A Reassessment. AU Altonji, Joseph G.; Williams, Nicolas.

Wolf, Holger C.

TI Currency Boards: The Ultimate Fix? AU Ghosh, Atish R.; Gulde, Anne-Marie; Wolf, Holger C.

Wolsey, Laurence A.

TI The 0-1 Knapsack Problem With a Single Continuous Variable. AU Marchand, Hugues; Wolsey, Laurence A.

Woock, R. A.

TI The Demand for Synthetic Fuels: Contingent Valuation of Quality- Differentiated Factors of Production. AU Braden, J. B.; Kolstad, C. D.; Woock, R. A.; Machado, J. A.

Wooders, John C.

TI One-Way Spillovers, Endogenous Innovator/Imitator Roles and Research Joint Ventures. AU Amir, Rabah; Wooders, John C.

TI An Experimental Study of Communication and Coordination in Noncooperative Games. AU Moreno, Diego; Wooders, John C.

Wooton, Ian

PD March 1998. TI Economic Geography and the Fiscal Effects of Regional Integration. AU Wooton, Ian; Ludema, Rodney D. AA Wooton: University of Glasgow. Ludema: Georgetown University. SR Centre for Economic Policy Research Discussion Paper: 1822; 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 F12, F15, F22, H73. KW Economic

Integration. Economic Geography. Factor Mobility. International Trade. Tax Competition.

AB In models of economic geography, plant-level scale economies and trade costs create incentives for spatial agglomeration of production into a manufacturing core and agricultural periphery, creating regional income differentials. We examine tax competition between national governments to influence the location of manufacturing activity. Labor is imperfectly mobile and governments impose redistributive taxes. Regional integration is modeled as either increased labor mobility or lower trade costs. We show that either type of integration may result in a decrease in the intensity of tax competition, and thus higher equilibrium taxes. Moreover, economic integration must increase taxes when the forces of agglomeration are the strongest.

Wu, Guojun
TI Asymmetric Volatility and Risk in Equity Markets. **AU** Bekaert, Geert; Wu, Guojun.

Wyplosz, Charles
PD December 1997. **TI** The Real Exchange Rate in Transition Economies. **AU** Wyplosz, Charles; Grafe, Clemens. **AA** Wyplosz: Graduate Institute of International Studies. Grafe: London School of Economics. **SR** Centre for Economic Policy Research Discussion Paper: 1773; 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** F31, F35, F41, L33, O33. **KW** Transition. 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.

Xiao, Zhijie
TI A Primer on Unit Root Testing. **AU** Phillips, Peter C. B.; Xiao, Zhijie.

TI How to Estimate Autoregressive Roots Near Unity. **AU** Phillips, Peter C. B.; Moon, Hyungsik; Xiao, Zhijie.

PD August 1998. **TI** Higher Order Approximations for Wald Statistics in Cointegrating Regressions. **AU** Xiao, Zhijie; Phillips, Peter C. B. **AA** Xiao: University of Illinois, Urbana-Champaign. Phillips: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1192; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. **PG** 43. **PR** no charge up to 3 papers; $3.00 domestic; 4.00 International. **JE** C22. **KW** Asymptotic Expansion. Bandwidth Selection. Cointegration. Spectral Regression. Wald Test.

AB Asymptotic expansions are developed for Wald test statistics in cointegrating regression models. These expansions provide an opportunity to reduce size distortion in testing by suitable bandwidth selection, and automated rules for doing so are calculated. Band spectral regression methods and tests are also considered. In such cases, it is shown how the effects of nonstationarity that dominate low frequency limit behavior also carry over to high frequency asymptotics, with consequential effects on bandwidth rules.

Yang, Der-Yuan
PD September 1997. **TI** A Cooperative Perspective on Sovereign Debt: Past and Present. **AA** University of California, Santa Barbara. **SR** University of California, Santa Barbara, Working Papers in Economics: 13/97; Working Papers in Economics, Department of Economics, University of California, Santa Barbara 93106. Website: www.econ.ucsb.edu. **PG** 24. **PR** no charge. **JE** C71, G14, H63, H87, N10. **KW** Institutions. Nash Bargaining. Sovereign Debt. Third World. Debt Crisis.

AB Sovereign states often borrow to finance their budgets in the modern era; in the medieval period kings had similar financing needs. Both types of sovereign borrowers share one characteristic: if they failed to fulfill their obligation, legal action is not one of lenders' options. However, as history has shown, some institutions evolved to secure lenders' rights. This paper provides a cooperative perspective of the negotiation between debtors and creditors in a two-period model using the Nash bargaining solution. Our results show that the initial debt and new loans are positively related, while the remaining debt and the interest rate are negatively related. These conclusions match the development of England after the Glorious Revolution.

PD October 1997. **TI** The Origin of the Bank of England: A Credible Commitment to Sovereign Debt. **AA** University of California, Santa Barbara. **SR** University of California, Santa Barbara, Working Papers in Economics: 01/98; Department of Economics, Working Paper Coordinator, University of California, Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. **PG** 10. **PR** no charge. **JE** C71, G14, H63, H87, N10. **KW** Bank of England. Credible Commitment. Prisoner's Dilemma. Sovereign Debt.

AB In economic development, institutions and organizations are critical elements which can be looked upon as rules and players of a game, respectively. Investigating how institutions evolve and why certain organizations emerge may help us better understand economic development, especially when the situation requires an efficient solution. The problem of sovereign financing shares the features of one-sided Prisoner's Dilemma (PD). Sovereign default had been a common phenomenon in England since the medieval period; however, the establishment of the Bank of England altered the sovereign's incentives and helped build mutual trust between the crown and Parliament. In this paper, we analyze the emergence of the Bank by viewing it as a commitment device which makes the king's promise to pay trustworthy.

Yang, Jian
PD August 1997. **TI** Semiparametric Maximum Likelihood Estimation of Nonlinear Regression Models and Monte Carlo Evidence. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics

Research Reports: 9713; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, Canada N6A 5C2. Website: www.sscl.uwo.ca/economics. PG 60. PR $10.00 Canadian per paper. JE none available. KW Semiparametric. Maximum Likelihood. Nonlinear Regression. Monte Carlo.

AB This paper studies adaptive estimation of nonlinear regression models with i.i.d. error terms. Previously in the literature, the adaptive maximum likelihood estimator (AMLE) has been proposed only when the densities of the error terms are assumed to be symmetric. AMLE is a one-step estimator and utilizes outer-product of gradient (OPG) matrix to estimate the information matrix, which could cause serious finite sample problems. I propose semiparametric maximum likelihood estimator (SMLE) for the nonlinear regression models with or without the symmetry condition. SMLE is defined by maximizing the nonparametric log-likelihood function constructed using the residuals from an initial root-n consistent estimate. I show that SML estimators are adaptive (asymptotically efficient) for all the adaptively estimable parameters in nonlinear regression models assuming or without the symmetry condition. Further, SML estimators are generally consistent for all the structural parameters even without the symmetry assumption of the error distribution. Monte Carlo studies show that, in the symmetric cases, SMLE performs the best and OLSE the worst for all the parameters based on the root MSE and interquartile range standards. The more the distance of the true distribution differs from the normal distribution the greater the relative efficiency gains SMLE and AMLE achieve over OLSE.

Yang, Tzu-Han
TI Testing Endogenous Growth in South Korea and Taiwan. AU Feenstra, Robert C.; Madani, Dorsati; Yang, Tzu-Han; Liang, Chi-Yuan.

Yelowitz, Aaron
TI Public Health Insurance and Private Savings. AU Gruber, Jonathan; Yelowitz, Aaron.

Zeckhauser, Richard
TI Earnings Management to Exceed Thresholds. AU Patel, Jayendu; Degeorge, Francois; Zeckhauser, Richard.

Zee, Howell H.
TI Taxation and the Household Saving Rate: Evidence From OECD Countries. AU Tanzi, Vito; Zee, Howell H.

Zeldes, Stephen P.
PD September 1998. TI Social Security Money's Worth. AU Zeldes, Stephen P.; Geanakoplos, John; Mitchell, Olivia S. AA Geanakoplos: Yale University, Mitchell: University of Pennsylvania. Zeldes: Columbia University. SR Yale Cowles Foundation Discussion Paper: 1193; Yale University, Cowles Foundation Library, Box 208281, New Haven, CT 06520. PG 69. PR no charge up to 3 papers; $3.00 domestic; 4.00 International. JE H55. KW Social Security.
AB This paper describes how three money's worth measures -- the benefit-to-tax ratio, the internal rate of return, and the net present value -- are calculated and used in analyses of social security reforms, including systems with privately managed individual accounts invested in equities. Declining returns from the U.S. social security system prove to be the inevitable result of having instituted an unfunded (pay-as-you-go) retirement system that delivered $7.9 trillion of net transfers (in 1997 present value dollars) to people born before 1917, and will deliver another $1.8 trillion to people born between 1918 and 1937. But young and future workers cannot necessarily do better by investing their payroll taxes in capital markets. If the old system were closed down, massive unfunded liabilities of $9-10 trillion would still have to be paid unless already accrued benefits were cut. Alternative methods of calculating these accrued benefits yield somewhat different numbers: the straight line calculation is $800 billion less than the constant benefit calculation we propose as the benchmark. Using this benchmark in a world with no uncertainty, we show that privatization without prefunding would not increase returns at all, net of the new taxes needed to pay for unfunded liabilities.

TI Would a Privatized Social Security System Really Pay a Higher Rate of Return? AU Geanakoplos, John; Mitchell, Olivia S.; Zeldes, Stephen P.

Zenou, Yves
TI Compensating Wage Differentials, Workers' Heterogeneity and Imperfect Competition in the Labor Market. AU Wauthy, Xavier; Zenou, Yves.

TI Skill Acquisition and Wage Competition With Heterogeneous Workers and Firms. AU Hamilton, Jonathan; Thisse, Jacques-Francois; Zenou, Yves.

TI Demand Uncertainty, Mismatch, and (Un)Employment. AU Jellal, Mohamed; Thisse, Jacques-Francois; Zenou, Yves.

Zhang, Lei
TI Sovereign Liquidity Crises: The Strategic Case for a Payments Standstill. AU Miller, Marcus H.; Zhang, Lei.

Zilibotti, Fabrizio
TI Unemployment vs. Mismatch of Talents: Reconsidering Unemployment Benefits. AU Marimon, Ramon; Zilibotti, Fabrizio.

TI Unemployment Versus Mismatch of Talents: Reconsidering Unemployment Benefits. AU Marimon, Ramon; Zilibotti, Fabrizio.

Zingales, Luigi
PD January 1998. TI Power in a Theory of the Firm. AU Zingales, Luigi; Rajan, Raghuram G. AA University of Chicago. SR Centre for Economic Policy Research Discussion Paper: 1777; 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 D21, D23, G32, L22, L23. KW Vertical Integration. Incomplete Contracts. Power. Firm Behavior. Investment.
AB Transactions take place in the firm rather than in the market because the firm offers agents who make specific investments power. Past literature emphasizes the allocation of ownership as the primary mechanism by which the firm does this. Within the contractibility assumptions of this literature, we identify a potentially superior mechanism, the regulation of access to critical resources. Access can be better than

ownership because: i) the power agents get from access is more contingent on them making the right investment; ii) ownership has adverse effects on the incentive to specialize. The theory explains the importance of internal organization and third-party ownership.

PD January 1998. TI Survival of the Fittest or the Fattest? Exit and Financing in the Trucking Industry. AA University of Chicago. SR Centre for Economic Policy Research Discussion Paper: 1778; 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 G31, G32, L11, L51, L92. KW Capital Structures. Product Markets. Trucking Industry.
AB This paper studies the impact that capital market imperfections have on the natural selection of the most efficient firms by estimating the effect of the pre-deregulation level of leverage on the survival of trucking firms after the Carter deregulation. Highly leveraged carriers are less likely to survive the deregulation shock, even after controlling for various measures of efficiency. This effect is stronger in the imperfectly competitive segment of the motor carrier industry. High debt seems to affect survival by curtailing investments and reducing the price per-ton-mile that a carrier can afford to charge after deregulation.

PD March 1998. TI The Cost of Diversity: The Diversification Discount and Inefficient Investment. AU Zingales, Luigi; Rajan, Raghuram G.; Servaes, Henri. AA Zingales and Rajan: University of Chicago. Servaes: University of North Carolina. SR Centre for Economic Policy Research Discussion Paper: 1801; 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 G31, L22. KW Diversification. Capital Budgeting. Conglomerate.
AB In a simple model of capital budgeting in a diversified firm where headquarters have limited power, we show that funds are allocated towards the most inefficient divisions. The distortion is greater, when the investment opportunities of the firm's divisions are more diverse. We test these implications on a panel of diversified firms in the United States during the period 1979-93. We find that i) diversified firms mis- allocate investment funds; ii) the extent of mis-allocation is positively related to the diversity of investment opportunities across divisions; and iii) the discount, at which these diversified firms trade, is positively related to the extent of the investment mis-allocation and to the diversity of investment opportunities across divisions.

PD March 1998. TI Corporate Governance. AA University of Chicago. SR Centre for Economic Policy Research Discussion Paper: 1806; 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 D20, G30, L20. KW Corporate Governance. Firm.
AB This paper summarizes my own personal view of what corporate governance is about. I argue that it makes sense to discuss corporate governance only in an incomplete contract world. In this world, the notion of corporate governance is intrinsically related to the definition of the firm. In this respect, the shortcomings of the existing definitions of the firm are reviewed and the possible applications of the idea that the firm is a "nexus of specific investments" introduced by Rajan and

Zingales (1997a and 1997b). The paper concludes by discussing the limitations of the incomplete contracts approach to corporate governance.

Zoega, Gylfi
TI The British Beveridge Curve: A Tale of Ten Regions.
AU Wall, Howard J.; Zoega, Gylfi.

Zona, J. Douglas
TI Ohio School Milk Markets: An Analysis of Bidding.
AU Porter, Robert H.; Zona, J. Douglas.