

## ABSTRACTS OF WORKING PAPERS IN ECONOMICS

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### Abadir, Karim M.

PD October 1995. TI Bias Nonmonotonicity in Stochastic Difference Equations. AU Abadir, Karim M.; Hadri, Kaddour. AA University of Exeter. SR University of Exeter, Department of Economics Discussion Paper: 95/12; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 9. PR no charge. JE C22, C51. KW Economic Time Series. Near-Nonstationarity. Estimator Biases.

AB We show that the bias of estimated parameters in autoregressive models can increase as the sample size grows. This unusual result is due to the effect of the initial sample observations that are typically neglected in theoretical asymptotic analysis, in spite of their empirical relevance. Implications for practical economic modeling are considered.

PD November 1995. TI Testing for Cointegration. AA University of Exeter. SR University of Exeter, Department of Economics Discussion Paper: 95/07; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 11. PR no charge. JE C32, C52. KW Fractional Integration. Cointegration. Time Series.

AB Testing for cointegration is now widespread in economics. Although the principle is sound, the practice has not always been so. In this note, an attempt is made to reveal flaws in some applied testing procedures. Incomplete nonstationary-null procedures make cointegration seem more likely than it actually is, while incomplete stationary-null procedures reject it too often. Complete definitions of integration and cointegration are given, some of them extending earlier definitions of these concepts.

### Abbink, Klaus

PD December 1995. TI RatImage-Research Assistance Toolbox for Computer-Aided Human Behavior Experiments. AU Abbink, Klaus; Sadrieh, Abdolkarim. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/325; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 234. PR no charge. JE C81, C88, C91, C92. KW Experiments. Experimental Economics. Computerized Experiments. Software Tools.

AB This paper reports on RatImage, a toolbox specifically developed to simplify the programming of software used in computerized human behavior experiments. RatImage contains Borland Turbo Pascal constants, variables, functions, and procedures which, when used, relieve programmers of many tedious and complex tasks, like graphical output, keyboard handling, mouse control, file access, and network

communication. The structure of the toolbox, its relationship to other programming methods, and its significance for computerized human behavior experiments are discussed. All provided pre-defined elements and routines are listed and described.

PD January 1996. TI RatDemo-A Ready-to-Run Experiment in 99 Program Lines. AU Abbink, Klaus; Sadrieh, Abdolkarim. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/354; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 8. PR no charge. JE C81, C88. KW Experiments. Experimental Economics. Computerized Experiments. Software Tools.

AB This paper report on RatDemo, an example program for the application of RatImage, the Research Assistance Toolbox for computerized human behavior experiments. The complete source code of this short experiment program is listed and briefly discussed. Since RatDemo combines several central features of RatImage into a simple, but fully operative program, it can provide an easy entry into the world of RatImage programming.

### Acemoglu, Daron

PD September 1994. TI Search in the Labour Market, Incomplete Contracts and Growth. AA Massachusetts Institute of Technology. SR Centre for Economic Policy Research, Discussion Paper: 1026; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 27. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE J31, O41, D24. KW Search. Human Capital. Wage Determination. Incomplete Contracts. Growth.

AB This paper shows that search in the labor market has important effects on accumulation decisions. In a labor market characterized by search, employment contracts are naturally incomplete and this creates a wedge between the rates of return and marginal products of both human and physical capital. As a result, when workers invest more in their human capital, they increase the rate of return on physical capital. Provided that these factors are complements in the production function, this will increase the desired level of investment for firms. Then, because physical capital is not being paid its marginal product, the rate of return on all human capital goes up. In this model, therefore, there are pecuniary increasing returns to scale in human capital accumulation in the sense that the more human capital there is, the more profitable it is to accumulate human capital. Applying this argument conversely, the presence of pecuniary increasing returns in physical capital accumulation also follows. These pecuniary increasing returns lead to

amplified inefficiencies and to the possibility of multiple equilibria. They also imply that factor distribution of income has an important impact on growth. Finally, the paper derives new links between unemployment and human capital accumulation and shows that when technology choice is endogenized, search introduces a negative wage formation externality which may lead to excessively fast diffusion of new technologies.

**PD** September 1994. **TI** A Dynamic Model of Collusion. **AA** Massachusetts Institute of Technology. **SR** Centre for Economic Policy Research, Discussion Paper: 1027; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 31. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** D32, L22. **KW** Monitoring Collusion. Implicit Collusion. Career Concerns. Threat of Lawsuits.

**AB** A monitor is hired to control the agent. Despite the lack of side-contracting opportunities it is shown that the agent and the monitor can collude. The conditions for such implicit collusion are that the monitor should expect future rents from a continued relationship and the agent should have the authority to influence these rents and a credible threat to do so. The paper shows that the credibility of the agent's threat depends on how the principal will interpret a disagreement between the agent and the monitor, which in turn depends on whether the principal expects collusion to take place.

#### Ackermann, Mihael

**PD** May 1995. **TI** Transition from a Planned to a Market Economy: the Interrelation of Subsidization of Firms, Budget Deficit, Unemployment and Inflation. **AU** Ackermann, Mihael; Krelle, Wilhelm. **AA** University of Bonn. **SR** Universität Bonn Sonderforschungsbereich, Discussion Paper: B/311; Sonderforschungsbereich 303 an der Universität Bonn, Lennestr. 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 42. **PR** no charge. **JE** P21, P27, E13, E61. **KW** Transition of Economies. Planned Economy. Market Economy. Firm Subsidies. Budget Deficits.

**AB** There are many important problems in the transition process from a planned to a market economy: changes of the political and social institutions, privatization, structural change of production, change of investment and consumption, to name only a few. They are all interrelated and should be dealt with in a general disequilibrium framework. This cannot be done here. Instead we single out some especially important economic problems: subsidization of firms, budget deficits, unemployment and inflation, which are the most visible concomitant phenomena in the transition process. We do this by means of partial analysis, i.e. we consider the subsidization of firms in a sector which is relatively small with respect to the total economy, so that the repercussions of changes in the sector considered on the sectors of the economy (except on the public sector which has to pay the subsidies) may be disregarded. This implies that at best we can derive partial optima. They may, however, reflect certain aspects of a reasonable economic policy in the difficult stage of transition. The paper is divided into two main parts. After a statement of the general problem, we first analyze it from the static point of view, i.e. assuming a short time horizon of the government such that the factor prices and the rate of inflation can be considered as given. In the second part we dynamize the static system of the first part. The factor prices and the rate of inflation become variables. The interrelation of subsidies,

budget deficits, unemployment and inflation depends on time. At the end of the paper some consequences are drawn with respect to the subsidization policy during this transitory phase of economic development. The constitutional and economic situation is different in each country in the transitory stage. We do not model a specific country but try to keep the approach general enough to cover the basic features of all countries as far as the subsidization problem is concerned.

#### Addison, John T.

**PD** November 1995. **TI** Mandated Benefits, Welfare, and Heterogeneous Firms. **AU** Addison, John T.; Barrett, C.R.; Siebert, W.S. **AA** Addison: University of Hull, University of Birmingham; Barrett: University of Birmingham; Siebert: University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 95/33; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. **PG** 35. **PR** 2 pounds. **JE** J32, J33, J38, D82. **KW** Mandated Benefits. State Provision. Asymmetric Information. Equity and Efficiency.

**AB** The paper constructs an asymmetric information model to investigate the efficiency and equity cases for mandated benefits. While we can find no scope for actual Pareto improvements, potential Pareto improvements may be possible, and the redistribution involved may in some cases favor "deserving" workers. In general, however, it appears that the more diverse are free market contracts -- separating the various worker types -- the less likely are mandates to be potentially Pareto improving. In these circumstances, a case can be made for the restriction of any mandate to large firms. But we are also able to show that direct state provision can preserve separations, and may thus be superior to mandates. The elements of the model are applied to maternity benefits.

#### Agenor, Pierre-Richard

**PD** November 1995. **TI** Consumption Smoothing and the Current Account: Evidence for France, 1970-94. **AU** Agenor, Pierre-Richard; Bismut, Claude; Cashin, Paul; McDermott, C. John. **AA** International Monetary Fund. **SR** International Monetary Fund, Working Paper: 95/119; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 9. **PR** not available. **JE** F32, F41, F47. **KW** Consumption Smoothing. France. Intertemporal Choice.

**AB** This paper estimates a simple consumption-smoothing model of the French current account, and examines its capacity to predict recent developments in France's external performance. The model views the current account as a buffer through which private agents can smooth consumption over time in response to temporary disturbances to output, investment, and government expenditure. The empirical results indicate that the model performs well overall, and predicts correctly the sharp turnaround in France's external accounts observed in the past three years--a feature of the data that conventional models of trade flows, based on income and relative price variables, appear unable to explain.

**PD** November 1995. **TI** The Labor Market and Economic Adjustment. **AA** International Monetary Fund. **SR** International Monetary Fund, Working Paper: 95/125; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 60. **PR** not available. **JE** E24, J23, J42. **KW** Monopsony. Wage Stickiness.

**AB** This paper examines the role of the labor market in the

transmission process of adjustment policies in developing countries. It begins by reviewing the recent evidence regarding the functioning of these markets. It then studies the implications of wage inertia, nominal contracts, labor market segmentation, and impediments to labor mobility for stabilization policies. The effect of labor market reforms on economic flexibility and the channels through which labor market imperfections alter the effects of structural adjustment measures are discussed next. The last part of the paper identifies a variety of issues that may require further investigation, such as the link between changes in relative wages and the distributional effects of adjustment policies.

PD December 1995. TI Competitiveness and External Trade Performance of the French Manufacturing Industry. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/137; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 21. PR not available. JE C32, F17, F41. KW France. Competitiveness. Manufacturing.

AB This paper provides an assessment of competitiveness and external trade performance of the French manufacturing industry during the 1980s and early 1990s. The first part of the paper reviews developments in a broad range of competitiveness indicators. The analysis indicates that the manufacturing sector appears to have maintained its competitive position in recent years. The second part discusses developments in export market shares. The third part estimates a vector error correction model relating the trade ratio to relative unit labor costs, domestic and foreign demand, and nonprice competitiveness. Variance decompositions suggest that fluctuations in price and nonprice competitiveness account for about two-fifths of fluctuations in manufacturing trade flows.

#### Albaek, Karsten

PD July 1995. TI Worker Flows and Job Flows in Danish Manufacturing, 1980-91. AU Albaek, Karsten; Sorensen, Bent E. AA Albaek: University of Copenhagen. Sorensen: University of Copenhagen and Brown University. SR University of Copenhagen, Institute of Economics, Discussion Paper: 95/12; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. PG 46. PR not available. JE E24, E32, J63. KW Worker Turnover. Business Cycle. Job Creation.

AB This paper examines turnover of workers and jobs on the panel of all plants in Danish manufacturing for the years 1980-1991. We relate worker turnover to job turnover with a focus on the share of worker reallocation driven by job reallocation, and we consider the behavior of job and worker flows over the business cycle, throwing light on some recent theories of the cyclical behavior of the labor market. The amount of job creation and job destruction is similar in Denmark and the U.S., but job reallocation in Denmark is acyclical contrary to American findings. The probability of plant closure covaries negatively with the business cycle whereas the amount of plant openings varies positively with the business cycle, in particular for small plants. Worker reallocation is strongly procyclical, due to strong procyclicality of replacement hirings (hiring to an existing job). Our findings are consistent with nonconvex adjustment costs for plant hiring and firing, and with models that explain replacement hirings as driven by worker quits, whereas they seem at odds with theories that view recessions as optimal periods for restructuring the plant labor force.

#### Alegre, Jose M. Roldan

TI Does Public Spending Crowd Out Private Investment? Evidence From a Panel of 14 OECD Countries. AU Argimon, Isabel; Gonzalez-Paramo, Jose M.; Alegre, Jose M. Roldan.

#### Alesina, Alberto

PD March 1995. TI On the Number and Size of Nations. AU Alesina, Alberto; Spolaore, Enrico. AA Alesina: Harvard University and National Bureau of Economic Research. Spolaore: Universite Libre de Bruxelles. SR National Bureau of Economic Research, Working Paper: 5050; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 30. PR \$5.00. JE H11, D72. KW Redistribution. State. Government. Secession.

AB This paper studies the equilibrium determination of the number of political jurisdictions in different political regimes, democratic or not, and in different economic environments, with more or less economic integration. We focus on the trade off between the benefits of large jurisdictions in terms of economies of scale and the costs of heterogeneity of large and diverse populations. Our model implies that: i) democratization leads to secessions; ii) without an appropriate redistributive scheme (which we characterize) in equilibrium one observes an inefficiently large number of countries; iii) the equilibrium number of countries is increasing in the amount of economic integration. We also study the welfare effects of economic integration and free trade when the number of countries is endogenous.

#### Altonji, Joseph G.

PD March 1995. TI The Effects of School and Family Characteristics on the Return to Education. AU Altonji, Joseph G.; Dunn, Thomas A. AA Altonji: Northwestern University and National Bureau of Economic Research. Dunn: Syracuse University. SR National Bureau of Economic Research, Working Paper: 5072; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 29. PR \$5.00. JE I21, J13. KW Parental Education. Wages. Public Education.

AB We measure the effects of parental education on the education profile of wages. The analysis uses sibling pairs from the Panel Study of Income Dynamics and the National Longitudinal Surveys of Labor Market Experience of Young Men and Young Women. We also use the variance across siblings in school characteristics to estimate the effects of school inputs on wages holding family background constant. We obtained mixed evidence on whether parental education raises the return to education. We find that teacher's salary, expenditures per pupil, and a composite index of school quality measures have a substantial positive effect on the wages of high school graduates.

#### Alvarez, Luis J.

PD 1994. TI BVAR Models in the Context of Cointegration: A Monte Carlo Experiment. AU Alvarez, Luis J.; Ballabriga, Fernando C. AA Alvarez: Banco de Espana. Ballabriga: ESADE and Banco de Espana. SR Banco de Espana Documento de Trabajo: 9405; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. PG 41. PR not available. JE C11, C15. KW BVAR. Monte Carlo

Method. Cointegration.

**AB** The kind of prior typically employed in Bayesian vector autoregression (BVAR) analysis has aroused widespread suspicion about the ability of these models to capture long-run patterns. This paper specifies a bivariate cointegrated stochastic process and conducts a Monte Carlo experiment to assess the small sample performance of two classical and two Bayesian estimation methods commonly applied to VAR models. In addition, a proposal to introduce a new dimension to the prior information in order to allow for explicit account of long-run restrictions is suggested and evaluated in the light of the experiment. The results of the experiment show that: (i) the Minnesota-type prior with hyperparameter search performs well, suggesting that the prevalent suspicion about the inability of this prior to capture long-run patterns is not well grounded; (ii) the fine-tuning of the prior is crucial; and (iii) adding long-run restrictions to the prior does not provide improvements in the case analyzed.

#### Amable, Bruno

**PD** 1995. **TI** Endogenous Growth and Cycles Through Radical Incremental Innovation. **AA** INRA and CEPREMAP. **SR** CEPREMAP Discussion Paper: 9504; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 24. **PR** 25 **F.F.** **JE** O33, O42. **KW** Endogenous Growth. Radical and Incremental Innovation. Cycles.

**AB** This paper develops a model of endogenous growth where innovation can take two forms, namely radical and incremental. The latter type of innovation means that a new intermediate good is introduced in the production of the final good, thus raising productivity in a Ethier-Romer-type way. A radical innovation means first that the level of knowledge is multiplied by a constant factor, which raises productivity in an Aghion-Howitt way, and second that the previous innovations are made obsolete. The economy is populated by a constant number of researchers, who may either engage in radical or incremental innovation activity. Incremental innovation is deterministic and continuous, radical innovation is discrete and stochastic. The market equilibrium is an allocation of the researchers between radical and incremental innovation. Different types of equilibria with perfect foresight are possible: fixed as well as periodic or aperiodic allocations.

#### Amundsen, Eirik Schroder

**PD** June 1995. **TI** Optimal Exploitation of a Biomass Confronted With the Threat of Partial Extinction. **AU** Amundsen, Eirik Schroder, Bjorndal, Trond. **AA** Amundsen: University of Bergen. Bjorndal: Norwegian School of Economics and Business Administration. **SR** University of Copenhagen, Institute of Economics, Discussion Paper: 95/11; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. **PG** 20. **PR** not available. **JE** Q20. **KW** Biomass Extinction. Uncertainty. Resource Exploitation.

**AB** This paper examines how to harvest a biomass confronted with the threat of partial extinction. We show that the uncertainty involved gives rise to two opposing effects determining an optimal steady state stock of the biomass. A "discount effect", leading to a smaller stock as compared to the certainty case, and a "cushion effect" leading to a larger stock. The net effect is indeterminate and depends on the size of the failure rate and the size of the possible collapse. Furthermore, it is shown that for some combinations of the failure rate and the

size of the collapse, a strategy risking total extinction may be optimal even though the biomass could have been saved with certainty. Likewise, for other combinations, a strategy of no harvest may be followed until a mishap has taken place. Finally, both repetitive collapses and stock dependent collapses are shown to lead to a smaller optimal steady state stock as compared to a one shot stock independent collapse.

#### Andersen, Torben G.

**PD** December 1995. **TI** GMM Estimation of a Stochastic Volatility Model: A Monte Carlo Study. **AU** Andersen, Torben G.; Sorensen, Bent E. **AA** Andersen: Northwestern University. Sorensen: University of Copenhagen and Brown University. **SR** University of Copenhagen, Institute of Economics, Discussion Paper: 95/19; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. **PG** 56. **PR** not available. **JE** C13, C15. **KW** GMM. Monte Carlo Method. Stochastic Volatility.

**AB** We examine the properties of alternative GMM procedures for estimation of the lognormal stochastic autoregressive volatility model through a large scale Monte Carlo study. We demonstrate that there is a fundamental trade-off between the number of moments, or information, included in estimation and the quality, or precision, of the objective function used for estimation. We provide a fairly transparent characterization of the trade-off in the present model. Furthermore, a large sample approximation to the optimal weighting matrix is utilized to explore the impact of the weighting matrix for estimation, specification testing and inference procedures, and to obtain practical efficiency bounds for the given class of GMM estimators. The results provide guidelines for obtaining desirable finite sample properties through the choice of the appropriate estimation design, and although the findings are specific to the model, the conclusions are likely to apply to a wide range of settings characterized by strong conditional heteroskedasticity and correlation among the moments.

#### Andersen, Torben M.

**PD** June 1994. **TI** Shocks and the Viability of a Fixed Exchange Rate Commitment. **AA** University of Aarhus. **SR** Centre for Economic Policy Research, Discussion Paper: 969; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 19. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F31, F33. **KW** Fixed Exchange Rates. Commitment. State Dependence. Regime Shifts.

**AB** The incentive to renege on a commitment to a fixed exchange rate is shown to be state contingent. A fixed exchange rate policy is not viable under "unusual" circumstances, and the incentive to violate the commitment is larger in the case of contractionary shocks than in the case of expansionary shocks. The possibility that the exchange rate regime is changed in "unusual" circumstances also has significant effects under "normal" circumstances, implying systematic devaluation expectations and output losses.

**PD** July 1995. **TI** Intertemporal Wage Smoothing. **AA** University of Aarhus. **SR** University of Aarhus, Department of Economics, Memo: 1995/7; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK/8000 Aarhus C, DENMARK. **PG** 24. **PR** no charge. **JE** E31, E32, J31. **KW** Wage Adjustment. Price Adjustment. Inertia. Risk.

**AB** Capital market imperfections make the future purchasing power of wage income risky. Therefore, current nominal wages may have intertemporal implications which affect wage determination. The influence of consumption risk on wage setting is analyzed in a general equilibrium model with an imperfectly competitive labor market (monopoly union). It is shown that the adjustment process implies wage smoothing which causes nominal wages to be less flexible than prices, and moreover employment shows more variability over the business cycle than real wages no matter whether the cycle is driven by real or nominal shocks.

#### Anderson, E.

**TI** Performance in Principal-Agent Dyads: The Causes and Consequences of Perceived Asymmetry of Commitment to the Relationship. **AU** Ross, Jr. W.T.; Anderson, E.; Weitz, B.

**TI** The Impact of Legitimacy on the Choice of Sales Organization: An Institutional Theory Perspective. **AU** Weiss, A.M.; Anderson, E.

**TI** Patterns of Credible Commitments: Territory and Brand Selectivity in Industrial Distribution Channels. **AU** Fein, Adam J.; Anderson, E.

#### Anderson, Kym

**PD** June 1994. **TI** European and American Regionalism: Effects on and Options for Asia. **AU** Anderson, Kym; Snape, Richard H. **AA** Anderson: University of Adelaide. Snape: Monash University. **SR** Centre for Economic Policy Research, Discussion Paper: 983; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 23. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F13, F15, F43. **KW** Economic Integration. European Union. NAFTA. Protectionism. Trading Blocs.

**AB** This paper addresses several questions of concern to economies excluded from the world's two major trading blocs -- the European Union (EU) and the North American Free Trade Agreement (NAFTA). First, is there evidence from the past that suggests the direct and indirect effects of regional integration agreements (RIAs) on trade and investment have been income-reducing for economies not included? Many would answer "yes", and some cite the increasing regionalization of world trade to support that view. We suggest that this conclusion is probably unwarranted. It is true that the share of world trade that is intra-regional has been increasing, but the proportion of GDP traded has also increased sufficiently rapidly for there also to be growth in trade with other regions, and in the share of GDP traded extra-regionally. Would enlargement of NAFTA and EU membership contribute to, or slow this past trend for increasing economic integration across regions as well as within regions? Not all the signs are positive and the net effect may indeed be negative, but the paper argues that on balance the concerns of excluded economies relating to trade and investment diversion are probably exaggerated. A broader systemic question that is more worrying for non-included small open economies is whether or not the proliferation of RIAs will erode the GATT rules-based on multilateral trading system. We conclude that there is indeed cause for this systemic concern. The paper also considers how Asian and other non-included economies might respond to the economic integration initiatives in North America, Europe and elsewhere.

#### Andrews, David

**PD** December 1995. **TI** The Mexican Financial Crisis: a Test of the Resilience of the Markets for Developing Country Securities. **AU** Andrews, David; Ishii, Shogo. **AA** International Monetary Fund. **SR** International Monetary Fund, Working Paper: 95/132; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 33. **PR** not available. **JE** G11, G12, G15. **KW** Capital Flows. Mexico. Developing Markets.

**AB** This paper reviews developments in private capital flows to developing countries since the Mexican financial crisis in December 1994. The paper points out that a strong recovery in these flows masks some significant changes in their characteristics, particularly in the type of borrowers back toward sovereigns and the currency denomination of new issues shifted away from U.S. dollars. Terms of new bond issues became significantly less favorable than before the Mexican crisis. One of the most striking developments was the sharp increase in bond placements by developing countries in deutsche mark and yen. It is shown that relatively favorable credit ratings assigned by Japanese rating agencies facilitated some developing countries to tap the yen bond market.

#### Angehrn, Albert A.

**PD** July 1995. **TI** Business Implications of Multimedia: The Case of Spain. **AU** Angehrn, Albert A.; Lozano, Alejandro. **AA** INSEAD. **SR** INSEAD, Working Papers: 96/10/CALT 2; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 50. **PR** not available. **JE** L82, L86. **KW** Multimedia. Spain. European Industry. Telecommunication Industry.

**AB** The aim of this study is to analyze the "Multimedia phenomenon" in order to provide up-to-date information and insights on its current impact on companies and on the development of European industry in general. This report focuses particularly on Spain, contributing to a better understanding of: the current state and the development of the Multimedia industry in Spain, the key factors affecting this development, the dynamics of market acceptance of current and future Multimedia products and services generated by this development, and the major transformation affecting industry in general derived from the spread of such products. The report provides recent data on key players, regulations, strategies of telecommunication companies, experiences with market reaction to multimedia products and services, and multimedia-enabled transformations which are underway in Spain. Comparisons with other European countries and the U.S. are provided, allowing a better understanding of the situation in Spain. The special characteristics of the Spanish market in terms of regulation, infrastructure, management style, consumers, and their specific attitude towards the adoption of new technologies are also examined. Future developments and key success factors in the new environment are also analyzed, as well as the remaining obstacles for the development of Multimedia in Spain.

#### Aoki, Reiko

**PD** March 1995. **TI** Product Development and the Timing of Information Disclosure Under U.S. and Japanese Patent Systems. **AU** Aoki, Reiko; Prusa, Thomas J. **AA** Aoki: State University of New York at Stony Brook. Prusa: State University of New York at Stony Brook and National Bureau of Economic Research. **SR** National

Bureau of Economic Research, Working Paper: 5063; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 18. PR \$5.00. JE D82, O32, O34. KW Research and Development. Asymmetric Information.

AB This paper examines the consequences of the differences in the timing of information disclosure between the U.S. and Japanese patent systems. Under the Japanese system it is possible for a firm to apply for a patent application. In contrast, in the U.S. the only way a firm learns about a rival's innovation is upon the actual granting of the rival's patent. We argue that this difference enables Japanese firms to coordinate their research and development efforts better than their U.S. counterparts and that this, in turn, leads to smaller quality improvements under the Japanese system. We show that the creation/diffusion tradeoff of patents can be influenced not only by the scope and length of patent protection but also by other features of the patenting process.

#### Ara, Ismat

PD September 1995. TI Marginal Likelihood Based Tests of a Subvector of the Parameter Vector of Linear Regression Disturbances. AU Ara, Ismat; King, Maxwell L. AA Monash University. SR Monash University, Department of Econometrics Working Paper: 12/95; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. PG 39. PR no charge. JE C12, C15, C22. KW Autocorrelation. Lagrange Multiplier Test. Likelihood Ratio Test. Power. Random Coefficients.

AB This paper is concerned with the problem of testing a subset of the parameters which characterize the error variance-covariance matrix in the general linear regression model. Formula for likelihood ratio, Wald, Lagrange multiplier and asymptotically locally most powerful test statistics based on the likelihood of a maximal invariant statistic or an equivalent marginal likelihood are given. Specific applications discussed are the problems of testing against AR(4) disturbances in the presence of AR(1) disturbances and testing for a Hildreth-Houck (1968) random coefficient against the alternative of a Rosenberg (1973) random coefficient. Monte Carlo size and power calculations for these two testing problems are reported. These results provide further evidence that supports the proposed approach to test construction. It also suggests that better handling of nuisance parameters is likely to improve the small sample properties of asymptotically based inference procedures.

#### Arellano, Manuel

TI Female Labour Force Participation in the 1980's: The Case of Spain. AU Bover, Olympia; Arellano, Manuel.

#### Argimon, Isabel

PD 1995. TI Does Public Spending Crowd Out Private Investment? Evidence From a Panel of 14 OECD Countries. AU Argimon, Isabel; Gonzalez-Paramo, Jose M.; Alegre, Jose M. Roldan. AA Argimon: Banco de Espana. Gonzalez-Paramo: Universidad Complutense. Alegre: Banco de Espana and European Monetary Institute. SR Banco de Espana Documento de Trabajo: 9523; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcalá, 50, 28014 Madrid. PG 25. PR not available. JE E22, E62, H54. KW Government Spending. Investment. Deficit

Reduction. Fiscal Policy.

AB This paper is concerned with the empirical relationship between government spending and private investment. A panel of 14 OECD countries is used. We present evidence which suggests the existence of a significant crowding-in effect of private investment by public investment through the positive impact of infrastructure on private investment productivity. Moreover, government consumption appears to crowd out private investment. The implications of these results are of foremost importance when it comes to fiscal consolidation. Deficit reductions engineered through cuts in public investment could severely impinge upon private capital accumulation and growth prospects.

#### Ariga, Kenn

TI Earnings and Seniority in Japan: A Re-Appraisal of the Existing Evidence and a Comparison with the UK. AU Brunello, Giorgio; Ariga, Kenn.

#### Artis, M. J.

PD May 1995. TI Growth and Development: What Scope For a European Initiative? Labour Subsidies: Old Wine in New Bottles? AU Artis, M. J.; Sinclair, Peter J.N. AA Artis: University of Florence. Sinclair: University of Birmingham. SR University of Birmingham, Department of Economics, Discussion Paper: 95/15; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. PG 29. PR 2 pounds. JE E24, J23, J68. KW Unemployment. Employment Subsidies. Efficiency Wages. Employee-Firm Contracts.

AB This paper reexamines the case for subsidizing employment. One superficially promising approach, based on the idea that government cofinancing of unemployment benefits could induce firms to lay off too many workers in bad times, turns out to be an unsatisfactory argument for employment subsidies when worker-firm contracts are optimal. But efficiency wage explanations for unemployment offer considerable scope for a revenue-neutral combination of a specific labor subsidy and ad valorem wage tax. When pitched low enough, unemployment must fall under a wide set of conditions.

#### Asakawa, K.

PD 1995. TI Managing Knowledge Conversion Process Across Borders: Toward a Framework of International Knowledge Management. AA INSEAD and Keio University. SR INSEAD, Working Papers: 95/91/OB; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 35. PR not available. JE F23. KW Knowledge Transfer. International. Management.

AB Development of a general framework on the way firms convert and transfer overseas local knowledge across borders is attempted. It is argued that the organizational arrangement of international knowledge conversion is not only contingent on structure and type of local knowledge but is also influenced by managerial and institutional factors.

TI Regional Management and Regional Headquarters in Europe: A Comparison of American and Japanese MNCs. AU Lehrer, M.; Asakawa, K.

PD November 1995. TI External-Internal Linkages and Overseas Autonomy-Control Tension: The Management Dilemma of the Japanese R&D in Europe. AA INSEAD.

SR INSEAD, Working Papers: 95/90/OB; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 23. PR not available. JE F23, L22. KW External/Internal Linkages. Autonomy-Control Tension. International R&D. Multinational Linkage. Japanese MNC.

AB By examining how external/internal linkages held by overseas R&D labs affect autonomy-control tension within MNCs, managerial dilemmas pertinent to international R&D management will be discussed, especially in the context of internationalization of Japanese R&D in Europe. R&D is liable to be affected by high autonomy-control tension due to countervailing institutional forces at the functional level (research/corporate) and the geographical level (host country/home country). The external linkages an overseas R&D lab develops tend to increase the expected degree of local autonomy vis-a-vis the parent. The external linkages tend to increase the need for internal control on the part of the parent, especially when such sensitive issues as intellectual property rights and research initiatives are involved. Managers use internal linkages as a condition based on which local autonomy can be granted. Similarly, a high degree of internal linkages tends to decrease the difficulty of internal control and would even allow for some potential increase in local autonomy. An alternative multinational linkage strategy becomes necessary for the Japanese MNCs in the era of global R&D management in which the conventional social/cultural control mechanism may break down. This paper attempts to provide a conceptual framework which enables us to associate such differences in linkage patterns with autonomy-control tension in a systematic way so that some new insight would be obtained regarding this classic yet unresolved tension.

#### Audretsch, David B.

PD May 1994. TI Knowledge Spillovers and the Geography of Innovation and Production. AU Audretsch, David B.; Feldman, Maryann P. AA Audretsch: Wissenschaftszentrum Berlin für Sozialforschung. Feldman: Goucher College. SR Centre for Economic Policy Research, Discussion Paper: 953; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 30. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE L14, O31, R12, D62. KW Innovation. Geography. Research and Development. Spillover.

AB This paper examines the extent to which innovative activity clusters spatially and links the geographic concentration of innovative activity to the degree to which knowledge externalities exist. Because one obvious explanation of why innovative activity tends to cluster geographically more in some industries than in others is that the location of production is more spatially concentrated, we first examine and then control for the geographic concentration of the location of production. Based on a data base that identifies innovative activity for individual states and specific industries for the United States, as well as the geographic distribution of production, we find that the propensity for innovative activity to cluster spatially is greater in industries where the creation of new knowledge and knowledge spillovers is more important. Even though such industries also tend to exhibit a greater geographic concentration of production, the empirical evidence suggests that the propensity for innovative activity to cluster is more attributable to the role of knowledge spillovers and not merely the geographic concentration of production.

PD July 1994. TI Asymmetric Information, Agency Costs and Innovative Entry. AA Wissenschaftszentrum Berlin für Sozialforschung. SR Centre for Economic Policy Research, Discussion Paper: 985; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 26. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE L14, L15, O31, D82. KW Innovation. Start Up. Entry. Industrial Organization. Information.

AB The decision of how best to appropriate the value of new economic knowledge is reached by individuals within the context of the decision-making process embedded in the principal-agent model and applied to organizations. Because new economic knowledge is not only imperfect but also inherently asymmetric across agents, a divergence in beliefs about its potential value can arise between an agent possessing that knowledge and the decision-making bureaucracy in a hierarchical organization. This leads to the prediction that agents are more likely to resort to starting a new firm in an effort to maximize the value of their potential innovation in industries characterized by a greater degree of knowledge asymmetries. Based on a panel data-base identifying new-firm start-ups in US manufacturing between 1976 and 1986 there is considerable evidence consistent with the hypothesis that start-up activity is shaped by the underlying knowledge conditions, or what is called the technological regime. New-firm start-ups are apparently less important under the routinized technological regime, where innovative activity tends to occur within the boundaries of incumbent enterprises. By contrast, under the entrepreneurial technological regime, where knowledge asymmetries are particularly prevalent, new-firm start-up activity plays a more important role.

PD October 1994. TI Industrial and Trade Policies for the Emerging Market Economies. AA Wissenschaftszentrum Berlin für Sozialforschung. SR Centre for Economic Policy Research, Discussion Paper: 1046; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 40. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE H81, F13, P52, D73. KW Industrial Policy. Trade Policy. Eastern Europe. Central Europe. Regulatory Capture.

AB The purpose of this paper is to suggest how institutions can be created and modified to devise and implement industrial policy in the emerging market economies. Two main issues confronting industrial policy institutions are how to avoid regulatory capture, that is, having those policy-makers with a mandate to devise and implement industrial policy consistent with international trade policy. The second section of this paper links institutions devising and implementing industrial and trade policies to the framework and timetable recently agreed upon in the Europe Agreements. The third section of the paper provides a framework for prescribing industrial policies, their interaction with trade policies, and institutions charged with policy formulation and implementation. At the heart of this framework is a clear distinction between sectoral policies, which essentially target the economic output of specific industries and even firms, and horizontal policies, which essentially focus on improving the quality of inputs in the production process.

#### Axilrod, Stephen H.

PD December 1995. TI Transformation of Markets and Policy Instruments for Open Market Operations.

AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/146; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 44. PR not available. JE E52, E58, H63. KW Economic Reform. Central Banks. Open Market Operations.

AB As developing countries and economies in transition have relied on deregulated, competitive markets to spur growth, their central banks have shifted toward using open market operations as a tool of monetary policy. To be most effective, such operations require supportive changes in other policy instruments (reserve requirements, discount window), a competitive banking system and securities market, and adaptation of particular open market or market-type instruments used to the stage of, and potential for, market development. The paper assesses options available to a central bank for encouraging a competitive market architecture and designing instruments for implementation of open market operations.

#### Ayat, K.L.

PD December 1995. TI Agreement and Disagreement Between Unit Root Tests. AU Ayat, K.L.; Boero, G.; Burridge, Peter; Sheldon, Marie. AA Ayat, Burridge, Sheldon: University of Birmingham; Boero: University of Cagliari. SR University of Birmingham, Department of Economics, Discussion Paper: 95/30; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. PG 33. PR 2 pounds. JE C22, C12. KW Unit Root Tests. Combinations. Agreements.

AB The extent to which several unit root tests agree under the null and alternatives is explored by Monte Carlo experiment. The results show clearly that considerable size changes may result from basing decisions on the outcomes of naive combinations of tests. Correcting for this, we usually find no gain in power over the better single test, for a variety of DGP's used in earlier studies. Attempting to control size distortions by combining test outcomes leads to substantial size reductions, only one of which are desirable. The results suggest that decisions should usually be based on the single best test alone, which, in our experiments, is the GLS-based test of Elliot, Rothenberg and Stock.

#### Ayres, Leslie W.

TI Simulation as a Useful Tool in Examining Waste Production. AU Wolfgang, N.C.; Ayres, Leslie W.

TI Eco-Thermodynamics: Exergy and Life Cycle Analysis. AU Ayres, Robert U.; Ayres, Leslie W.; Martinas, Katalin

TI The Life-Cycle of Chlorine: Part I and II. AU Ayres, Robert U.; Ayres, Leslie W.

TI Eco-Thermodynamics: Exergy and Life Cycle Analysis. AU Ayres, Robert U.; Ayres, Leslie W.; Martinas, Katalin.

#### Ayres, Robert U.

PD March 1995. TI Statistical Measures of Unsustainability. AA INSEAD. SR INSEAD, Working Papers: 95/34/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 21. PR not available. JE J11, Q32, Q40. KW Sustainability. Environment. Energy. Non-Renewable Resources.

AB See the abstract for Ayres (1995), INSEAD Working

Papers, 95/84/EPS.

PD August 1995. TI Eco-Restructuring: The Transition to an Ecologically Sustainable Economy. AU Ayres, Robert U.; Schmidt-Bleek, F. AA Ayres: INSEAD. Schmidt-Bleek: Wuppertal Institute. SR INSEAD, Working Papers: 95/72/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 30. PR not available. JE Q20, Q32, Q40. KW Sustainability. Anthropogenic Disturbance. Environmental Resources. Ecological Adaptation. Ecological Risk.

AB See the abstract for Ayres (1995), INSEAD Working Papers, 95/83/EPS.

PD September 1995. TI Statistical Measures of Unsustainability. AA INSEAD. SR INSEAD, Working Papers: 95/84/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 16. PR not available. JE J11, Q20, Q32, Q40. KW Sustainability. Environment. Energy. Non-Renewable Resources.

AB Statistical measures are needed to reveal at a glance how far (or near) various countries are to meeting the conditions of long run sustainability and how conditions are changing on a year to year basis (i.e. whether sustainability is being approached or not). The scheme proposed in this paper presents numerical comparisons of energy and materials use in the real world vis a vis an ideal case where all of the identifiable criteria for sustainability are satisfied. Apart from population stabilization, five general but quantifiable criteria for sustainability are suggested, including (1) stabilization of greenhouse gas concentrations in the atmosphere, (2) stabilization of acidity (pH) in rainfall, (3) reduction of dissipative uses and wastes of heavy metals to natural (or lower) mobilization rates, (4) elimination of agriculture based on pumping "fossil" water from non-renewable aquifers and (5) elimination of loss of arable land because of salination or erosion. Other criteria, such as preservation of biodiversity and socio-economic equity between countries and generations might be added to the list. They introduce more difficult measurement problems, however, which are not considered further in the paper. Having fixed the list of criteria, the next step is to identify measures that either go to zero or unity, as the system approaches more and more closely to sustainability, at least in the limited sense defined above. Various types of measures of sustainability/unsustainability can be developed: (i) measures of relative dependence of the economy on non-renewable sources of energy and materials, (ii) measures of the productivity of energy and materials consumed by the economic system and (iii) measures of dissipative loss, especially of toxic and hazardous substances. Specific examples of each type are discussed.

PD October 1995. TI Eco-Restructuring: The Transition to an Ecologically Sustainable Economy. AA INSEAD. SR INSEAD, Working Papers: 95/83/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 34. PR not available. JE J11, Q20, Q32, Q40. KW Sustainability. Environmental Resources. Anthropogenic Disturbance. Ecological Risk. Ecological Adaptation.

AB The term "sustainability" has been popularized in recent years, and there is some danger of it becoming a cliché. This paper seeks to sort out the questions about sustainability on which there is substantial scientific agreement from those unresolved questions that are still subject to considerable



controversy. In this context, several theses are proposed. The first thesis is that there are limits to the capacity of the natural environment to accommodate anthropogenic disturbances. The earth is finite. Second, there are also limits to the substitutability of conventional market goods and services for environmental services. Third, there are limits to the extent to which technology can repair or replace environmental resources that are irreversibly damaged. For instance, one cannot imagine undertaking to substitute engineering systems designed by humans to replace natural means of climate control and stabilization. With respect to the controversial questions, an agenda for urgently needed research is suggested. For instance, there is a possibility that nature may be exceedingly adaptable, resilient and resistant to anthropogenic disturbance. Or nature may not be so resilient. It is conceivable, too, that human ingenuity could invent engineering alternatives to natural processes being threatened, or that technology can offer ways of "adaptation" to ecological and climatic stress. However, the argument is that these possibilities are not probabilities. The limits of resilience are probably not very distant, and it is very difficult to justify a high degree of confidence that "business as usual" can continue without risk for even a few more decades. In brief, the underlying problem is that many current demographic, economic and industrial trends currently seem to point unmistakably in the other direction. To achieve sustainability and minimize ecological risk, I think it is necessary to reverse most of these trends. Indeed, some aggregated measures of material and energy use may have to be reduced by large factors (four to ten). Such a reversal will entail very fundamental changes in the economic system. The directions and magnitudes of these changes are assessed briefly, and various approaches to their implementation are analyzed.

PD 1996. TI Limits to the Growth Paradigm. AA INSEAD. SR INSEAD, Working Papers: 96/18/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 21. PR not available. JE F10, O30, O47. KW Economic Growth. Human Welfare. Technological Progress. Trade. Environmental Protection.

AB This paper is a synthesis of several current controversies. It makes four broad claims: (1) that economic growth (as conventionally measured) is not, and never has been, the most important contributor to increasing human welfare; (2) that technological progress has always been the primary source of both growth and welfare (considered separately); (3) that trade was at best a minor contributor to growth in the past and is probably now contributing negatively to both national wealth and equity, hence to welfare, in Western Europe and North America and (4) that both growth (of GDP) and trade are increasingly incompatible with environmental protection. In fact, while increasing prosperity breeds environmental sensitivity, many of the processes by which it is achieved are environmentally destructive. The paper assembles and presents some of the key arguments and evidence.

PD January 1996. TI Eco-Thermodynamics: Exergy and Life Cycle Analysis. AU Ayres, Robert U.; Ayres, Leslie W.; Martinas, Katalin AA Ayres, R. and Ayres, L.: INSEAD. Martinas: Eotvos University. SR INSEAD, Working Papers: 96/04/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 48. PR not available. JE Q30, Q40. KW Environment. Exergy. Life-Cycle Analysis. Resource Accounting.

AB See the abstract for Ayres R., Ayres L., and Martinas

(1996), INSEAD Working Papers, 96/19/EPS.

PD January 1996. TI The Life-Cycle of Chlorine: Part I and II. AU Ayres, Robert U.; Ayres, Leslie W. AA INSEAD. SR INSEAD, Working Papers: 96/08/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 28. PR not available. JE K32, L60. KW Environment. Chlorine. Chemical Uses.

AB Chlorine is an important industrial chemical. Not only is it a component of many important products, it is also needed for many chemical manufacturing processes, even where it does not appear in the final product. But many chlorine chemicals, especially organo-chlorines, are toxic, carcinogenic, teratogenic or otherwise disturbing (or potentially disturbing) to the environment. For this reason, some environmentalists -- notably Greenpeace -- have seriously proposed and lobbied for a ban, not just on some products, but on all uses of elemental chlorine itself. The chemical industry is taking this threat seriously and mounting a vigorous defense. But the debate so far is not illuminating the issues effectively, because both sides are selectively using questionable and unverifiable data. The fact that there are scientific uncertainties is not really the problem. The problem is that data in the public domain and accessible to environmentalists and even regulatory authorities is of very poor quality. Thanks to industry secrecy, much crucial information is unavailable and much of what is available is wrong. The purpose of this paper, and the two that follow, is to elucidate the information requirements for an adequate life-cycle analysis of chlorine and its uses. The present paper deals with electrolytic chlorine production and the chlorine-mercury connection. The next paper deals with conversion processes and losses and further chemical industry uses of chlorine. The third and final paper deals with end uses of chlorine and their environmental consequences.

PD March 1996. TI Eco-Thermodynamics: Exergy and Life Cycle Analysis. AU Ayres, Robert U.; Ayres, Leslie W.; Martinas, Katalin. AA Ayres, R. and Ayres, L.: INSEAD. Martinas: Eotvos University. SR INSEAD, Working Papers: 96/19/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 56. PR not available. JE Q30, Q40. KW Environment. Energy. Life-Cycle Analysis. Resource Accounting.

AB This paper argues that thermodynamics offers a means of accounting both for resources and wastes in a systematic and uniform way. Unfortunately, the proposed measure has been called by several different names, including available work, availability, exergy, and essergy by different authors, in different countries and for different purposes. Another closely related measure has been called potential entropy, or physical information ( $\pi$  potential). At bottom, however, exergy is a measure of distance from thermodynamic equilibrium. It is not a conserved quantity (like energy), but it is possible to construct an exergy balance for any energy or materials transformation process, accounting for inputs, process losses, useful products and wastes. The essential unity underlying the various independent definitions and research efforts has not been recognized until recently. Most of the basic data has been compiled and has been published in the scientific literature. Unfortunately, because it was done mainly in the context of design optimization in mechanical, chemical and metallurgical engineering, the relevant publications are not very accessible to other disciplines. The new feature of the present work is to extend the applications of exergy analysis into the realm of resource and waste accounting and to present the results in an

integrated analytical framework, namely life cycle analysis (LCA). To do this for a non-specialist audience requires considerable background explanation. This is done in Part I (Sections 1 through 6). Applications and examples are discussed in subsequent sections (part II). The paper concludes that the proposed measure (which we call *exergy* hereafter) is indeed feasible for general statistical use, both as a measure of resource stocks and flows, and as a measure of waste emissions and potential for causing environmental harm.

#### Aziz, Jahangir

PD October 1995. TI Discretionary Trading and Asset Price Volatility. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/104; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 27. PR not available. JE D84, G12. KW Volatility. Developing Markets.

AB Against the backdrop of emerging stock markets, this paper examines an asset market where investors behave strategically based on their private information. It is shown that if the investor base expands in the form of more informed traders entering the market, in contrast to the commonly held view, price volatility actually increases. Moreover, if entry is endogenized using transaction costs (brokerage fees), it turns out that the level of participation is stochastic and the market displays "excess volatility" in price. Informed traders participate in trading only when they believe that the probability of making speculative profits is large and therefore informed trading is discretionary. An extension of the model opens up the possibility of the market displaying informational herding-like behavior despite traders having long trading horizons.

#### Bacchetta, Philippe

PD February 1995. TI The Impact of Monetary Policy and Bank Lending: Some International Evidence. AU Bacchetta, Philippe; Ballabriga, Fernando C. AA Bacchetta: Studienzentrum Gerzensee, University of Lausanne, and Institut d'Analisi Economica. Ballabriga: ESADE and Institut d'Analisi Economica. SR Universite de Lausanne Cahiers de Recherches Economiques: 9501; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 22. PR no charge. JE E44, E52, C32. KW Monetary Policy. Bank Lending. VAR.

AB There has been extensive empirical research on the role of credit markets in the transmission of U.S. monetary policy, but the evidence for other countries is scarce. This paper compares the U.S. experience with a set of thirteen European countries by examining monetary VARs including banks' balance sheets in the spirit of Bernanke and Blinder (AER, 1992). It is shown that the VAR methodology provides plausible results for interpreting interest rate shocks as monetary policy shocks in most countries. The evolution of bank lending after a monetary contraction is analyzed. For most countries, it is shown that, in the medium run, bank loans decline more than money. In the short run, however, loans are sticky and react less than money. This evidence is similar to the U.S. and is consistent with the "lending" view of monetary policy.

#### Baganha, M.P

PD January 1995. TI The Residual Life of the Renewal

Process: A Simple Algorithm. AU Baganha, M.P.; Pyke, D.F.; Ferrer, G. AA Baganha: Universidade Nova de Lisboa. Pyke: Dartmouth College. Ferrer: INSEAD. SR INSEAD, Working Papers: 95/02/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 12. PR not available. JE C63, E22, E27. KW Renewal Process. Residual Life. Convergence. (s, S) Inventory System.

AB We develop a simple algorithm for computing the distribution of the residual life when the renewal process is discrete. The algorithm does not require convolutions of the renewal process. We define the conditions under which the distribution converges and when it does not. We also investigate a well-known approximation for the mean and variance of the residual life widely used in inventory applications, based on the limit of the excess random variable as the number of renewals approaches infinity. We describe conditions under which the approximation can be used and when the algorithm is preferred.

PD January 1995. TI The Undershoot of the Reorder Point: Tests of an Approximation. AU Baganha, M.P.; Pyke, D.F.; Ferrer, G. AA Baganha: Universidade Nova de Lisboa. Pyke: Dartmouth College. Ferrer: INSEAD. SR INSEAD, Working Papers: 95/03/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 24. PR not available. JE C63, E22, E27. KW Undershoot. Renewal Process. Reorder Point. Inventory.

AB We investigate a widely used approximation for the mean and variance of the undershoot. The approximation is based on the limit of the excess random variable of a renewal process as the order size approaches infinity. In the current business environment which emphasizes small batch sizes and frequent deliveries, many inventory systems order in batch sizes that are not large. We investigate the potential error that could be introduced by using the approximation for a variety of batch sizes and demand distributions.

#### Bagwell, Kyle

PD July 1994. TI Multilateral Tariff Cooperation During the Formation of Customs Unions. AU Bagwell, Kyle; Staiger, Robert W. AA Bagwell: Northwestern University. Staiger: University of Wisconsin. SR Centre for Economic Policy Research, Discussion Paper: 962; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 37. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F13, F15. KW Regionalism. Customs Unions. Tariff Cooperation.

AB We study the implications of customs union formation for multilateral tariff cooperation. We model cooperation in multilateral trade policy as self-enforcing, in that it involves balancing the current gains from deviating unilaterally from an agreed-upon trade policy against the future losses from forfeiting the benefits of multilateral cooperation that such a unilateral defection would imply. The early stages of the process of customs union formation are shown to alter this dynamic incentive constraint in a way that leads to a temporary "honeymoon" for liberal multilateral trade policies. We find, however, that the harmony between customs unions and multilateral liberalization is temporary: Eventually, as the full impact of the emerging customs union becomes felt, a less favorable balance between current and future conditions re-emerges, and the liberal multilateral policies of the honeymoon phase cannot be sustained. We argue that this is compatible with the evolving implications of the formation of the European

Community customs union for the ability to sustain liberal multilateral trade policies under the General Agreement on Tariffs and Trade.

**PD** March 1995. **TI** Collusion Over the Business Cycle. **AU** Bagwell, Kyle; Staiger, Robert W. **AA** Bagwell: Northwestern University. Staiger: The University of Wisconsin and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5056; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 35. **PR** \$5.00. **JE** D43, L13, E31. **KW** Collusion. Inflation. Business Cycles. Oligopoly.

**AB** We present a theory of collusive pricing in markets subject to business cycle fluctuations. In the business cycle model that we adopt, market demand alternates stochastically between fast-growth (boom) and slow-growth (recession) phases. We provide a complete characterization of the most-collusive prices and show that: (1) the most-collusive prices may be procyclical (countercyclical) when demand growth rates are positively (negatively) correlated through time, and (2) the amplitude of the collusive pricing cycle is larger when the expected duration of boom phases decreases and when the expected duration of recession phases increases. We also offer a generalization of Rotemberg and Saloner's (1986) model, and interpret their findings in terms of transitory demand shocks that occur within broader business cycles phases.

#### Baier, Scott L.

**PD** 1994. **TI** Monetary Innovations, Real Effects, and the European Monetary System. **AA** Michigan State University. **SR** Michigan State University, Econometrics and Economic Theory Papers: 9406; Department of Economics, Michigan State University, East Lansing, Michigan 48824. **PG** 33. **PR** not available. **JE** F33, F32. **KW** Exchange Rates. Liquidity Effects. Maastricht Treaty.

**AB** This paper is a theoretical investigation of the likely outcomes of the effects of monetary innovations when the Treaty of Maastricht is implemented. The model employed is a version of Fuerst's (1992) liquidity effects model. It is shown that monetary injections that exceed households' anticipated values will lead to increases in output and employment. Though there exists a positive short-run relationship between employment and unexpected money growth it is also shown that the long-run relationship is a negative one. Finally, it is shown that from a policy standpoint, the best policy is a low inflation, procyclical policy.

#### Bailey, Ralph W.

**PD** January 1996. **TI** Disaggregation in Flexible Demand Systems: the Block-AIDS. **AU** Bailey, Ralph W.; Brenton, Paul. **AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 96/01; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. **PG** 18. **PR** 2 pounds. **JE** D11, D12. **KW** Consumer Demand. Cost Function.

**AB** A common method of conserving degrees of freedom when estimating demand systems is to impose separability in a two-stage budgeting framework. Two-stage budgeting, however, imposes additional unnecessary restrictions above those of separability. A preferable approach is to impose the restrictions of separability in a single level demand system. Unfortunately, in flexible demand models such as the AIDS

these restrictions can be imposed only at a single point in the data sample, and entail rather messy, and computationally expensive, non-linear constraints on the estimated parameters. We therefore propose a return, in the modern context of demand systems based on the cost function, to the more traditional approach of single-stage budgeting with parameter-conserving constraints on cross-price effects: the Block-AIDS. The attractions of this model in applied work are: ease of estimation, the relatively small number of parameters (particularly when there are many commodity groups), and the flexibility it allows (within a "rational" framework) to the consumer. We compare the two-stage-budgeting and Block-AIDS approaches to cross-country data.

#### Balazs, K.

**TI** The Downside of Downsizing. **AU** Kets De Vries, M.F.R.; Balazs, K.

#### Baldwin, Richard E.

**PD** September 1994. **TI** Enlargement of the European Union: The Economic Consequences for the Scandinavian Countries. **AU** Baldwin, Richard E.; Flam, Harry. **AA** Baldwin: University of Geneva. Flam: University of Stockholm. **SR** Centre for Economic Policy Research, Occasional Paper: n/a; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 32. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, and institutions. **JE** F15, F23. **KW** EEA. European Economic Area. Economic Integration. Scandinavia.

**AB** The two essays in this Occasional Paper take opposite views of the European Economic Area's viability. The main conclusion of the Flam paper is that EU membership is not very important economically, if one assumes that the EEA is a long-run solution to the single-market threat. Although he makes this assumption in his formal analysis, Flam is not an EEA-optimist. He explicitly points out that the future of the EEA is by no means certain. The main conclusion of the Baldwin paper is that the economic gains from joining the EU will be large because the EEA will fail, leaving EU accession as the only way that Scandinavians can adjust to the new commercial realities in Europe. In particular, he argues that Scandinavian parliaments and industries would soon find the "influence deficit" intolerable. Therefore, a "no" vote this autumn is likely to force many Scandinavian firms to individually overcome the "influence deficit" by becoming EU-based firms.

#### Baldwin, Robert E.

**PD** July 1994. **TI** An Analysis of US International Trade Commission Decisions in Antidumping, Countervailing Duty and Safeguard Cases. **AU** Baldwin, Robert E.; Steagall, Jeffrey W. **AA** Baldwin: University of Wisconsin-Madison. Steagall: University of North Florida. **SR** Centre for Economic Policy Research, Discussion Paper: 990; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 21. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F13, F11. **KW** Trade Policy. Antidumping Duties. Countervailing Duties. Safeguards.

**AB** This paper investigates the economic factors that best explain the decisions of the International Trade Commission in administering the injury provisions of US antidumping, countervailing duty, and safeguard laws during the 1980s.

Utilizing the economic data collected by the Commission for each investigation, it attempts to ascertain through regression analysis how strictly the commissioners have interpreted these laws in recent years, in terms of the economic conditions required for finding that an industry has been injured, and for establishing a causal relationship between imports and this injury.

### Baliga, Sandeep

PD December 1995. TI Renegotiation in Repeated Games With Transfers. AU Baliga, Sandeep; Evans, Roberts. AA University of Cambridge. SR University of Cambridge, Department of Applied Economics, Amalgamated Series Working Paper: 9601; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 14. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE C70. KW Repeated Games. Equilibrium. AB The authors consider repeated games with transferable utility: players have an endowment of wealth in each period in which transfers can be made. It is shown that if endowments are large enough and the common discount factor high enough, then a strong renegotiation-proof equilibrium (SRP) in the sense of Farrell and Maskin (1989) exists. As the discount factor goes to 1, the set of SRP payoffs converges to the set of efficient, individually rational payoffs.

### Balkenborg, Dieter

PD January 1995. TI Evolutionary Stability, Strictness and Repeated Games with Common Interests. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/305; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 33. PR no charge. JE C72, C73. KW Repeated Games. Equilibrium Set. Finite. Repetitive. Common Interest Games.

AB Strict equilibrium sets generalize the concept of strict equilibrium points to sets. They coincide with the evolutionary stable sets in asymmetric games. In this paper we study strict equilibrium sets of repeated games. For finitely repeated common interest games we show: There is a fixed upper bound on the number of inefficient outcomes that can occur along the outcome paths induced by strict equilibrium sets of the repeated game. This bound depends only on the stage game and is independent of the number of repetitions. But we also show that common interest games are generically the only games with the property that a strict equilibrium set exists in arbitrarily long finite repetitions. Similar results are obtained for infinitely repeated games with discounted payoffs when the discount factor is close to unity.

PD May 1995. TI On the Interpretation of Evolutionarily Stable Sets. AU Balkenborg, Dieter; Schlag, Karl H. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/313; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 32. PR no charge. JE C72, C73. KW Evolutionarily Stability. Strict Equilibrium. Mixed Strategy Model. Asymmetric Contest.

AB We call a set of strategies "uniformly evolutionarily stable" if the following holds after a small mutation of a monomorphic population playing a strategy in the set: A) No mutant strategy can spread. B) Mutant strategies not in the set

will be driven out. C) The Meaning of "a small mutation" can be chosen independently of both the mutant and the incumbent strategy. We consider our notion an intuitive extension of the concept of an evolutionarily stable strategy. We show that our notion coincides with the notion of evolutionarily stable sets due to Thomas in the case of bimatrix games, but it is stronger in general. As an application we study uniformly evolutionarily stable sets in truly asymmetric contests.

PD May 1995. TI Evolutionary Stability in Asymmetric Population Games. AU Balkenborg, Dieter; Schlag, Karl H. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/314; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 24. PR no charge. JE C72, C73. KW Evolutionarily Stability. Neutral Stability. Strict Equilibrium. Mixed Strategy Model. Asymmetric Contest.

AB We extend the notions of evolutionary stability and, for the first time, that of neutral stability to asymmetric games played between two populations. Stability with respect to simultaneous entry of a small proportion of mutants into both populations is considered. Allocations where neither mutant can ever spread are called neutrally stable. For bimatrix games, neutral stability in the asymmetric population game is found to be a weaker concept than neutral stability in the asymmetric contest. Moreover existence is guaranteed for 2 x 2 bimatrix games. Sets of neutrally stable strategy pairs such that for any pair of mutants not in the set at least one mutant is driven out are called evolutionarily stable. Evolutionarily stable sets are shown to be equivalent to strict equilibrium sets. Additionally, uniformity considerations are investigated.

PD October 1995. TI A Necessary and Sufficient Epistemic Condition for Playing Backward Induction. AU Balkenborg, Dieter; Winter, Eyal. AA Balkenborg: University of Bonn. Winter: Hebrew University of Jerusalem. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/331; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 22. PR no charge. JE C72, D81. KW Backward Induction. Perfect Information Games. Epistemic Conditions. Common Knowledge.

AB In an epistemic framework due to Aumann we characterize the condition on the rationality of the players that is both necessary and sufficient to imply backward induction in perfect information games in agent form. This condition requires each player to know that the players are rational at later (but not at previous) decision nodes.

### Ballabriga, Fernando C.

TI BVAR Models in the Context of Cointegration: A Monte Carlo Experiment. AU Alvarez, Luis J.; Ballabriga, Fernando C.

TI The Impact of Monetary Policy and Bank Lending: Some International Evidence. AU Bacchetta, Philippe; Ballabriga, Fernando C.

### Barrett, C.R

TI Mandated Benefits, Welfare, and Heterogeneous Firms. AU Addison, John T.; Barrett, C.R.; Siebert, W.S.

### Barrett, Garry F.

PD February 1995. TI Dynamics of Canadian Welfare

Participation. AU Barrett, Garry F.; Cragg, Michael I. AA Barrett: University of British Columbia. Cragg: Columbia University. SR University of British Columbia, Department of Economics Discussion Paper: 95/08; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 38. PR 20 cents per page Canadian to other than educational institutions. JE D63, H53, H31. KW Welfare Participation. Canadian Welfare. Welfare Programs.

AB Although Canada is contemplating major reforms of welfare policy, there is scant information regarding the use of welfare. This paper addresses this gap by documenting the dynamics of welfare participation in British Columbia over the period 1980-1992. These patterns suggest conclusions important to policy. First, governments need to focus on helping individuals become self-sufficient and to remain off welfare rather than encouraging quicker exits. Second, it may be more efficient for governments to target special programs at single parent families who remain on welfare for long periods, taking account of their needs and circumstances.

**Barro, Robert J.**

PD September 1994. TI Capital Mobility in Neoclassical Models of Growth. AU Barro, Robert J.; Mankiw, N. Gregory; Sala-I-Martin, Xavier. AA Barro and Mankiw: Harvard University. Sala-I-Martin: Yale University. SR Centre for Economic Policy Research, Discussion Paper: 1019; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 23. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE E13, F21, F43, O41. KW Neoclassical Growth. Capital Mobility. Convergence.

AB The neoclassical growth model accords with empirical evidence of convergence if capital is viewed broadly to include human investments, so that diminishing returns to capital set in slowly, and if differences in government policies or other variables create substantial differences in steady-state positions. Open economy versions of the theory predict higher rates of convergence than those observed empirically, however. We show that the open economy model conforms with the evidence if an economy can borrow to finance only a portion of its capital, for example, if human capital must be financed by domestic savings.

**Bayoumi, Tamim A.**

PD June 1994. TI A Formal Model of Optimum Currency Areas. AA International Monetary Fund. SR Centre for Economic Policy Research, Discussion Paper: 968; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 23. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F33, F36. KW Optimum Currency Areas.

AB A model of optimum currency areas is presented using a general equilibrium model with regionally differentiated goods. The choice of a currency union depends upon the size of the underlying disturbances, the correlation between these disturbances, the costs of transactions across currencies, factor mobility across regions, and the interrelationships between demand for different goods. It is found that while a currency union can raise the welfare of the regions within the union, it unambiguously lowers welfare for those outside the union.

PD July 1994. TI Relative Prices and Economic

Adjustment in the US and EU: A Real Story About European Monetary Union. AU Bayoumi, Tamim A.; Thomas, Alun. AA International Monetary Fund. SR Centre for Economic Policy Research, Discussion Paper: 988; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 22. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F15, F33, R11. KW Relative Prices. Common Currency. EMU.

AB Structural vector autoregressions are used to analyze the relationship between real output and relative prices within the European Union (EU) and the United States. Relative price variability appears to be more important for adjustment within the EU than the United States, reflecting the lower integration of goods and factor markets. In the absence of higher market integration, the lower relative price variability implied by the introduction of a single currency in the EU could well cause significant economic disruption.

PD October 1994. TI Consumption, Income, and International Capital Market Integration. AU Bayoumi, Tamim A.; McDonald, Ronald. AA Bayoumi: International Monetary Fund. McDonald: University of Strathclyde. SR Centre for Economic Policy Research, Discussion Paper: 1028; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 24. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE E21, F36. KW Consumption. Capital Markets.

AB This paper uses consumption patterns across countries to measure capital market integration. It argues that earlier empirical tests of this type were potentially misspecified and proposes a more robust specification. The results indicate that Japan was the only industrialized country for which national consumption was fully integrated with the rest of the world over the period 1973-89. For the other countries the source of the failure varies. Within the European Union it is generally associated with incomplete integration across capital markets. Elsewhere, consumption is found to be excessively dependent on disposable income.

PD October 1994. TI Restraining Yourself: Fiscal Rules and Stabilization. AU Bayoumi, Tamim A.; Eichengreen, Barry. AA Bayoumi: International Monetary Fund. Eichengreen: University of California, Berkeley. SR Centre for Economic Policy Research, Discussion Paper: 1029; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 25. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE E62, H61, H72. KW Deficit. Debt. Fiscal Restraint. State Government.

AB State budgets can, in principle, provide significant fiscal stabilization that could otherwise be provided by other government entities within the United States. This paper tests the impact of fiscal restraints (such as state balanced budget amendments and other devices) on fiscal stabilization by looking at stabilization across US states, and compare it with behavior of central government and lower levels of government in a number of countries. Our results indicate that state budgets provided about one-seventh of the total fiscal offset to income fluctuations in the 1970s and 1980s.

PD October 1994. TI On the Optimality of Consumption Across Canadian Provinces. AU Bayoumi, Tamim A.; McDonald, Ronald. AA Bayoumi: International Monetary

Fund. McDonald: University of Strathclyde. SR Centre for Economic Policy Research, Discussion Paper: 1030; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 19. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE E44, F36, R22. KW Capital Market Integration. Consumption.

AB This paper tests for the optimality of consumption across Canadian provinces. The results indicate that consumption is highly integrated within the central and eastern core of the country, based around Ontario and Quebec. This is not true for provinces in the western half of the country, however, or for the most easterly province, Newfoundland. All of the provinces which fail the test for optimality are subject to large regional income disturbances. It is concluded that large enough disturbances can limit financial intermediation even when capital markets are highly integrated, as they are in Canada.

PD November 1995. TI Is Regionalism Simply a Diversion? Evidence from the Evolution of the EC and EFTA. AU Bayoumi, Tamim A.; Eichengreen, Barry. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/109; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 26. PR not available. JE F13, F14. KW Trade Agreements. Trade Diversion. EFTA.

AB This paper considers the impact on trade of preferential arrangements in Europe since the 1950's. Using a first difference version of the gravity model, we find that the EEC and EFTA altered the pattern of international trade. We also find evidence of trade diversion in several cases, notably that of the EEC in the 1960's.

PD December 1995. TI Macroeconomic Shocks and Trade Flows Within Sub-Saharan Africa: Implications for Optimum Currency Arrangements. AU Bayoumi, Tamim A.; Ostry, Jonathan D. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/142; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 27. PR not available. JE F33, F36. KW Africa. Foreign Exchange. International Trade.

AB Africa has more countries than any other continent, and hence the largest number of potential monetary and exchange rate arrangements. This paper looks at whether the existing highly fractured monetary arrangements in Sub-Saharan Africa correspond to what might be expected from the theory of optimum currency areas. This is done by analyzing both the size and correlation of real disturbances across countries and the level of intraregional trade. The results indicate little evidence that Sub-Saharan African countries would benefit in the near future from larger currency unions.

### Beaudry, Paul

PD January 1996. TI Exploring General Equilibrium Implications of Skill-Biased Technological Change. AU Beaudry, Paul; Devereux, Michael B. AA Beaudry: University of British Columbia and National Bureau of Economic Research. Devereux: University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 96/01; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 26. PR 20 cents per page Canadian to other than educational institutions. JE J31, O33. KW Skill-Biased. Technological Change.

Capital Accumulation.

AB There is mounting evidence that the pattern of relative wage movements over the last decade may reflect technological innovation favoring high skill workers. In light of this observation, this paper explores some positive and normative implications of such a technological change. Within an OLG framework, we show that the dynamics of accumulation for both physical capital and human capital are such that, following a skill-biased technological change, market forces may push the economy on a downward path that converges to a lower steady state level of output. Moreover, we show that this process will be accompanied by decreased aggregate savings, increased real interest rates and a widening of the wage distribution. This parallels several major trends observed in the US economy. How might fiscal policy respond to a such a change? We find that the optimal response is always to reduce transfers from the young generation to the old and that, by doing so, aggregate output can be assured to grow.

PD February 1996. TI Monetary Instability, the Predictability of Prices and the Allocation of Investment: An Empirical Investigation Using UK Panel Data. AU Beaudry, Paul; Caglayan, Mustafa; Schiantarelli, Fabio. AA Beaudry: University of British Columbia and National Bureau of Economic Research. Caglayan and Schiantarelli: Boston College. SR University of British Columbia, Department of Economics Discussion Paper: 96/04; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 35. PR 20 cents per page Canadian to other than educational institutions.

JE E42, G11, E22. KW Monetary Instability. Investment. AB It is often argued that monetary instability reduces the informational content of market signals and thereby hinders the efficient allocation of investment. In this paper we use a signal extraction framework to give empirical content to this idea. In particular, we show why this framework predicts that, as monetary uncertainty decreases, the cross-sectional distribution of investment widens. We then explore this hypothesis using panel data information for UK companies over twenty years. We examine whether different measures of macro uncertainty help to explain the time variation in the cross-sectional distribution of investment rates. Our data generally support the view that monetary instability may affect investment allocation through its effect on the predictability of prices.

PD February 1996. TI The Cost of Business Cycles and the Stabilization Value of Unemployment Insurance. AU Beaudry, Paul; Pages, Carman. AA Beaudry: University of British Columbia and National Bureau of Economic Research. Pages: Inter-American Development Bank. SR University of British Columbia, Department of Economics Discussion Paper: 96/05; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 44. PR 20 cents per page Canadian to other than educational institutions. JE E61, J65, J68, E32. KW Business Cycles. Stabilization Policy. Unemployment Insurance.

AB This paper offers a new perspective on why labor market policies aimed at reducing the cost of business cycles may be warranted and how such policies should be designed in order to improve welfare. To this end, we develop a quantitative dynamic equilibrium model to illustrate how the contractual structure of the labor market may hide significant undiversified wage risk induced by aggregate fluctuations. The environment analyzed is such that the only imperfectly diversified risk borne

by a worker is the risk that one's job be hit by a reallocation shock when the market for new contracts is depressed. When we fit the model to replicate the amount of wage variation estimated from micro data, we obtain estimates of the potential value of stabilization policies that are substantially larger than those found in the literature. We use the framework to examine several policy issues and show, in particular, why unemployment insurance schemes that allow payments to vary with the state of the economy may dominate non-contingent unemployment insurance schemes.

### Ben-David, Dan

PD June 1994. TI The Great Wars, the Great Crash, and the Unit Root Hypothesis: Some New Evidence About an Old Stylized Fact. AU Ben-David, Dan; Papell, David H. AA University of Houston. SR Centre for Economic Policy Research, Discussion Paper: 965; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 18. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE C22, E13, O11, O47. KW Economic Growth. Unit Root.

AB For decades, the prevailing sentiment among economists was that growth rates remain constant over the long run. Kaldor considered this to be one of the six important "stylized facts" that theory should address, and until the emergence of endogenous growth models, this was a fundamental feature of growth theory. This paper uses an endogenous trend break model to investigate the unit root hypothesis for 16 countries, using annual GDP data spanning up to 130 years. Rejection of the unit root, which is facilitated by the inclusion of a trend break, introduces the possibility of examining the long-run behavior of growth rates. We find that most countries exhibited fairly steady growth for a period lasting several decades. The termination of this period was usually characterized by a significant and sudden drop in GDP levels. But rather than simply returning to their previous steady-state path, as predicted by the standard neoclassical growth model, most countries continued to grow at roughly double their pre-break rates for many decades, even after their original growth path had been surpassed.

### Benabou, Roland

PD July 1994. TI Education, Income Distribution, and Growth: The Local Connection. AA Massachusetts Institute of Technology. SR Centre for Economic Policy Research, Discussion Paper: 995; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 29. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE D31, I22, O41. KW Education. Income Distribution. Human Capital. Growth. Inequality.

AB This paper develops a simple model of human capital accumulation and community formation by heterogeneous families, which provides an integrated framework for analyzing the local determinants of inequality and growth. Five main conclusions emerge. First, minor differences in education technologies, preferences, or wealth, can lead to a high degree of stratification. Imperfect capital markets are not necessary, but will compound these other sources. Second, stratification makes inequality in education and income more persistent across generations. Whether the same is true of inequality in total wealth depends on the ability of the rich to appropriate the rents created by their secession. Third, the polarization of urban

areas resulting from individual residential decisions can be quite inefficient, both from the point of view of aggregate growth and in the Pareto sense, especially in the long run. Fourth, when state-wide equalization of school expenditures is insufficient to reduce stratification, it may improve educational achievement in poor communities much less than it lowers it in richer communities; thus average academic performance and income growth both fall. Yet it may still be possible for education policy to improve both equity and efficiency. Fifth, because of the cumulative nature of the stratification process, it is likely to be much harder to reverse once it has run its course than to arrest at an early stage.

### Benoit, Jean-Pierre

PD April 1996. TI The Folk Theorems for Repeated Games: A Synthesis. AU Benoit, Jean-Pierre; Krishna, Vijay. AA Benoit: New York University. Krishna: Penn State University. SR University of Copenhagen, Institute of Economics, Discussion Paper: 96/03; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. PG 34. PR not available. JE C72, C73. KW Repeated Games. Folk Theorems.

AB We present a synthesis of various folk theorems for repeated games.

### Bentolila, Samuel

TI Wage Bargaining in Industries with Market Power. AU Padilla, A. Jorge; Bentolila, Samuel; Dolado, Juan J.

### Betts, Caroline

PD October 1995. TI Exchange Rate Dynamics and International Transmission in a Model of Pricing-To-Market. AU Betts, Caroline; Devereux, Michael B. AA Betts: University of Southern California. Devereux: University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 95/36; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 19. PR 20 cents per page Canadian to other than educational institutions. JE F31, E31. KW Pricing-to-Market. Exchange Rates. Purchasing Power Parity.

AB Recent evidence shows clearly that exchange rate movements have very little effect on prices of traded goods. This paper develops a general equilibrium model consistent with the non-response of prices to exchange rate movements that are generated by money shocks. In the model some firms engage in pricing-to-market (PTM) across countries. The main question addressed is the degree to which PTM itself affects the behavior of the exchange rate. It is shown that the presence of PTM combined with sticky local-currency nominal prices magnifies the response of the exchange rate to money shocks, and that the degree of exchange rate variability may be increased considerably relative to a model where the law of one price holds continuously. It is further shown that the presence of PTM affects the international transmission of shocks in an important way. The higher is the degree of PTM, the less of an effect a domestic money shock has on foreign consumption, but the higher is the effect on foreign output. In terms of welfare, monetary policy is a "beggar-thy-neighbor" instrument in the presence of a high degree of PTM.

**Bilal, Sanoussi**

PD September 1995. TI Welfare Effects of a Change in the Supply of Protection: a Two-stage Lobbying Process. AA University of Birmingham. SR University of Birmingham, Department of Economics, Discussion Paper: 95/23; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. PG 18. PR 2 pounds. JE D72, F13. KW Lobbying. Welfare. Administered Protection. Political Protection. Political Economy.

AB The purpose of this paper is to estimate the welfare impact of a change in the supply of protection when political and administered protection can be sought in a two-stage lobbying process. Contrary to what may be expected, tightening the rules to one avenue of protection does not inevitably improve national welfare, in particular when: (1) an alternative route to protection is available, (2) the cost of seeking protection increases, and (3) protection can be sought more than once. A major reason is that in these three cases, welfare-reducing lobbying effort may increase. In consequence, this analysis suggests that policy makers should be cautious about the remedies adopted to reduce the negative welfare impact of protection-seeking activities and resulting trade restrictions, in particular when they choose to change the "rules of the game".

PD September 1995. TI The Political Economy of Regional Integration: the Demand for Trade Protection. AA University of Birmingham. SR University of Birmingham, Department of Economics, Discussion Paper: 95/26; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. PG 42. PR 2 pounds. JE D72, F13, F15. KW Lobbying. Trade Protection. Political Economy. Regional Integration.

AB This paper examines the influence of regional integration on the demand for protection. Previous studies have suggested that a customs union reduces the pressures for trade restrictions, as national interest groups have less weight to influence a central trade authority than their own government. On the contrary, this paper argues that protectionist preferences may not be diluted at the regional level. The reasons for this lie in the ability of protection interests to organize themselves at the regional level and the advantage they have over anti-protectionist forces in doing so (principally due to their superiority in controlling the potential free rider problem). In consequence, specific groups seeking protection are likely to experience a relative (if not absolute) reinforcement of their preferences in a trade bloc.

PD September 1995. TI The Political Economy of Regional Integration: the Supply of Trade Protection. AA University of Birmingham. SR University of Birmingham, Department of Economics, Discussion Paper: 95/27; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. PG 47. PR 2 pounds. JE D72, D73, F13, F15. KW Lobbying. Trade Protection. Political Economy. Regional Integration. European Union.

AB The purpose of this paper was to discuss the institutional aspects of regional integration and its implication for the determination of external trade policies by a trade bloc. In particular, this study raises the question: Can institutional designs in a regional integration area increase the responsiveness of trade authorities to protectionist demands?

Contrary to some previous research, the analysis shows that the answer is affirmative. As illustrated by the European Union experience, the supply of trade protection in the context of regional integration crucially depends on the design and evolution of institutions adopted by the trade bloc. Moreover, the dynamic process of regional integration entails a redefinition of rules which inevitably attracts lobbying activities (in particular from those with protectionist interests). In consequence, in the absence of a strong political commitment, the danger exists that the design of new institutions will be captured by protectionist forces.

**Binmore, Ken**

PD June 1995. TI Hard Bargains and Lost Opportunities. AU Binmore, Ken; Proulx, Chris; Samuelson, Larry; Swierzbinski, Joe. AA Binmore and Swierzbinski: University College London. Proulx: University of Michigan. Samuelson: University of Wisconsin. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/319; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrass 37, D53113, Bonn 1, DEUTSCHLAND. PG 34. PR no charge. JE C78, C72. KW Bargaining. Coase Theorem. Evolutionary Games. Drift.

AB We examine an Outside Option Game in which player I submits a claim for a share of a cake while player II simultaneously either makes a claim or chooses to opt out. If player II opts out, then she receives an opt-out payment while player I receives nothing. If player II opts in and if the claims total less than the cake, then each player receives his or her claim plus half of the surplus. If the claims total more than the cake, both players receive zero. Tension arises in this game between player I's desire to seek as large a share of the cake as possible and the necessity of providing player II with a sufficiently large payoff to ensure that she will opt in. Economic theories that stress efficiency predict that player II will opt in. We argue that trial-and-error learning processes can teach the competitive skills needed to secure large shares of the cake more effectively than the cooperative skills needed to ensure that the cake is available to be divided. As a result, outcomes will arise in which player II opts out, especially when the payment from doing so is attractive. We conduct experiments in which player IIs commonly opt in when their opt-out payment is small, but frequently opt out for larger opt-out payments.

PD August 1995. TI Backward Induction and Rationality. AA University College London. SR University College London Discussion Paper: 95/10; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG 20. PR 3 Pounds; checks payable to Department of Economics, University College London. JE C72, C73. KW Backward Induction. Rationality.

AB When does this backward induction principle apply? This paper uses Rosenthal's Centipede Game to argue that the formal theorems offered on this subject are often misleading. In particular, it may be just as "rational" for the first player in the Centipede to deviate from the backward-induction action as to use it.

**Birley, S.**

PD 1995. TI Finding the High Flying Entrepreneurs: A Cautionary Tale. AU Birley, S.; Muzyka, Daniel F.; Dove, C.; Rossell, G. AA Birley: Imperial College of Science, Technology and Medicine. Muzyka and Rossell: INSEAD.



Dove: Newchurch & Company. SR INSEAD, Working Papers: 95/61/ENT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 7. PR not available. JE L11, M13. KW Entrepreneurial Firm. European Study. American Business Conference.

AB Locating new businesses has always been a problem. By their very nature, they do not appear in any listings until they are already established and have identified themselves as requiring a telephone, a credit rating, as employing others, or as registering for Valued Added Tax (VAT) or sales tax. Moreover, these listings are not always publicly available, they may be incomplete or out of date, or they may not list the firm by age or by size, making the task of isolating the new and small firm both long and laborious. Indeed, the potential errors in attempting to identify the population, and thus take a random or representative sample, may be so large as totally to negate the exercise (Birley 1984, Aldrich et al. 1989). On the surface, however, this problem should not arise when attempting to find the more established firms and their founders. More particularly, it would seem intuitively obvious that the easiest population for researchers to identify would be that of the "high flyers", the entrepreneurs who own and manage the fast growing companies. After all, in the USA, lists would appear to abound and to be published in journals such as INC or Venture, or through membership organizations such as Young Presidents. Unfortunately, these lists are not compiled through any rigorous research process, but rather through invitation to readers, subscribers, members and entrepreneurs to submit candidates. While this may, indeed, be an effective and, possibly, accurate method, there is no evidence to this effect. Nevertheless, in 1992, the researchers were asked by a European Task Force to conduct a pilot study to assess the viability and cost of identifying the hundred largest, high growth, entrepreneurial firms which would form the base for the creation of the European equivalent of the American Business Conference (ABC). This group would not only provide visible role models for other entrepreneurs across Europe, but would also be an important "sounding board" for European policy in relation to the entrepreneurial firm. This research note reports the results of the pilot study.

TI Trade-Offs in the Venture Capital Decision. AU Muzyka, Daniel F.; Birley, S.; Leleux, B.

### Bismut, Claude

TI Consumption Smoothing and the Current Account: Evidence for France, 1970-94. AU Agenor, Pierre-Richard; Bismut, Claude; Cashin, Paul; McDermott, C. John.

### Bjorndal, Trond

TI Optimal Exploitation of a Biomass Confronted With the Threat of Partial Extinction. AU Amundsen, Eirik Schroder; Bjorndal, Trond.

### Black, Jane

PD November 1995. TI Too Few Risk Takers. AU Black, Jane; De Meza, David. AA University of Exeter. SR University of Exeter, Department of Economics Discussion Paper: 95/04; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 20. PR no charge. JE D52, D81, D82. KW Risk Aversion. Employment. Occupational Licensing.

AB This paper shows that costly state verification creates a

bias against risky activities in the policy relevant sense that everyone may gain if entry to them is subsidized. The result holds even in the presence of private insurance. In fact, it may be preferable to ban private insurance and rely on subsidies to risky occupations.

### Blackburn, Joseph D.

PD 1995. TI Time-Based Software Development. AU Blackburn, Joseph D.; Scudder, Gary D.; Van Wassenhove, Luk N.; Hill, C. AA Blackburn, Scudder and Hill: Vanderbilt University. Van Wassenhove: INSEAD. SR INSEAD, Working Papers: 95/36/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 19. PR not available. JE L86, M11. KW Computer Software. Management. Product Development. AB Software projects are commonly late and over budget, causing the product to be late to market. This study, based on questionnaires and field research with software managers in Europe, the U.S. and Japan, seeks to isolate the management practices that accelerate software development. The results suggest that global differences are not pronounced: Japanese software factories have development processes structured similar to their U.S. and European counterparts; productivity also is roughly equivalent. To reduce development time, software managers currently achieve greater leverage from the managers of people and the cross-functional process than with the use of CASE tools and technology.

TI Limits to Concurrency. AU Hoedemaker, G.M.; Blackburn, Joseph D.; Van Wassenhove, Luk N.

PD October 1995. TI Improving Speed and Productivity of Software Development: A Survey of European Software Developers. AU Blackburn, Joseph D.; Scudder, Gary D.; Van Wassenhove, Luk N. AA Blackburn and Scudder: Vanderbilt University. Van Wassenhove: INSEAD. SR INSEAD, Working Papers: 95/88/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 17. PR not available. JE M11, L86. KW Software Development. Management.

AB Time is an essential measure of performance in software development because time delays tend to fall directly to the bottom line. To address this issue, this research seeks to distinguish time-based software development practices: those managerial actions that result in faster development speed. This study is based upon a survey of software management practices in Western Europe and builds upon an earlier study we carried out in the U.S. and Japan. We measure the extent to which managers in the U.S., Japan and Europe differ in their management of software projects and also determine the tools, technology and practices that separate fast and slow developers.

PD February 1996. TI Improving Speed and Productivity of Software Development. AU Blackburn, Joseph D.; Scudder, Gary D.; Van Wassenhove, Luk N. AA Blackburn and Scudder: Vanderbilt University. Van Wassenhove: INSEAD. SR INSEAD, Working Papers: 96/11/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 15. PR not available. JE L86, M11, O32. KW Software Development. Management. Concurrent Development.

AB Time is an essential measure of performance in software development because time delays tend to fall directly to the bottom line. To address this issue, this research seeks to

distinguish time-based software development practices: those managerial actions that result in faster development and higher productivity. This study is based upon a survey of software management practices in Western Europe and builds upon and earlier study we carried out in the U.S. and Japan. We describe a set of managerial actions that separate fast and slow developers and construct a framework called Concurrent Software Engineering for implementing these practices.

### Blackburn, Keith

PD June 1995. TI Public Policy and Economic Growth in an Imperfectly Competitive World of Interdependent Economies. AU Blackburn, Keith; Hansen, Lill. AA Blackburn: University of Southampton and Bank of England. Hansen: University of Copenhagen. SR University of Copenhagen, Institute of Economics, Discussion Paper: 95/05; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. PG 39. PR not available. JE C71, C72, D62, F42. KW Human Capital. Welfare Effects. Growth. International Policy Coordination.

AB We consider an artificial world of two interdependent economies which produce differentiated commodities and accumulate human capital. Commodities are traded and human capital production depends on country specific public expenditures and worldwide knowledge. Public goods are differentiated in terms of their relative yields of consumption and production services. The terms of trade link between countries gives rise to negative policy spillover effects on welfare while the externalities in human capital production account for positive policy spillover effects on welfare. We study optimal policy as the equilibrium outcome of a dynamic game between benevolent governments. We show that, while welfare is never lower, growth may either be higher or lower under cooperation than under noncooperation depending on the extent to which public goods are differentiated and the relative strengths of different cross-country externalities.

### Blackorby, Charles

PD January 1995. TI Birth-Date Dependent Population Ethics: Critical-Level Principles. AU Blackorby, Charles; Bossert, Walter. AA University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 95/05; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 18. PR 20 cents per page Canadian to other than educational institutions. JE D63, D71. KW Population. Ethics. Discounting.

AB This paper investigates birth-date dependent principles for social evaluation in an intertemporal framework in which population size may vary across states of affairs. We weaken the strong Pareto principle in order to allow individuals' birth dates to matter in establishing a social ordering. Using the axiom, "Independence of the utilities of the dead," we characterize population principles with a recursive structure. If the population substitution principle is added, birth-date dependent generalizations of the Critical-Level Generalized Utilitarian principles are obtained. Appending stationarity leads to the special case of geometric discounting.

PD August 1995. TI Income Inequality Measurement: The Normative Approach. AU Blackorby, Charles; Bossert, Walter; Donaldson, David. AA University of British Columbia. SR University of British Columbia, Department

of Economics Discussion Paper: 95/23; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 22. PR 20 cents per page Canadian to other than educational institutions. JE D63, C43. KW Income Inequality. Ethical Index Numbers.

AB This paper provides a survey of normative approaches to inequality measurement, to be published as a chapter in a volume on income inequality. We present general methods for deriving ethical inequality indexes from social-evaluation orderings such as the Atkinson-Kolm-Sen and Kolm procedures. Relative, absolute, and other index types are related to these general approaches. A discussion of ordinal indexes as well as numerically significant indexes is included. In addition, we discuss the decomposition of indexes into measures of intergroup and intragroup inequality.

PD August 1995. TI Intertemporally Consistent Population Ethics: Birth-Date Dependent Classical Principles. AU Blackorby, Charles; Bossert, Walter; Donaldson, David. AA University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 95/26; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 29. PR 20 cents per page Canadian to other than educational institutions. JE D63, D71. KW Social Evaluation. Population Ethics. Classical Utilitarianism. Discounting.

AB This paper shows that, in a partially welfarist framework that permits discounting, per-period social evaluations can be consistent with a timeless social ordering only if social principles lead to the repugnant conclusion. The same result applies if per-period social evaluations are replaced by forward-looking evaluations (social orderings that, in a given period, depend on present and future utilities only). This is the case because geometric classical generalized utilitarian principles are the only social principles satisfying these intertemporal consistency conditions together with some basic assumptions. The conclusion to be drawn from this paper is that history must matter to some extent if social-evaluation principles are to be ethically acceptable.

PD November 1995. TI Uncertainty and Critical-Level Population Principles: A Static Model. AU Blackorby, Charles; Bossert, Walter; Donaldson, David. AA Blackorby and Donaldson: University of British Columbia. Bossert: University of Waterloo. SR University of British Columbia, Department of Economics Discussion Paper: 95/42; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 23. PR 20 cents per page Canadian to other than educational institutions. JE D63, D71, D81. KW Uncertainty. Population. Ex Ante. Ex Post.

AB This paper analyzes variable-population social-evaluation principles in a framework where outcomes are uncertain. In a static model, we provide characterizations of expected-utility versions of Critical-Level Generalized Utilitarian rules. These principles evaluate lotteries over possible states of the world on the basis of the sum of the expected values of differences between transformed utility levels and a transformed critical level, conditional on the agents' being alive in the states under consideration. Equivalently, the Critical-Level Utilitarian value functions applied to weighted individual expected utilities can be employed. Weights are determined by the anonymity axiom.

**Blanchard, Pierre**

PD August 1995. TI Misspecified Heterogeneity in Panel Data Models. AU Blanchard, Pierre; Matyas, Laszlo. AA Blanchard: Universite de Paris XII. Matyas: Monash University and Budapest University. SR Monash University, Department of Econometrics Working Paper: 10/95; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. PG 32. PR no charge. JE C15, C23. KW Panel Data. Misspecification. Monte Carlo Method. Heterogeneity. Error Components Model. AB In this paper we analyze systematically through Monte Carlo simulations the consequences of misspecified heterogeneity on the most popular linear panel data models. We also illustrate our findings through the estimation of a well-known investment demand model.

**Bloemhof-Ruwaard, J.M**

TI Optimising Environmental Product Life Cycles: A Case Study of the European Pulp and Paper Sector. AU Weaver, P.M.; Gabel, H.L.; Bloemhof-Ruwaard, J.M.; Van Wassenhove, Luk N.

TI Optimising Environmental Product Life Cycles: A Case Study of the European Pulp and Paper Sector. AU Weaver, P.M.; Gabel, H.L.; Bloemhof-Ruwaard, J.M.; Van Wassenhove, Luk N.

PD August 1995. TI An Environmental Life Cycle Optimization Model for the European Pulp and Paper Industry. AU Bloemhof-Ruwaard, J.M.; Van Wassenhove, Luk N.; Gabel, H.L.; Weaver, P.M. AA Bloemhof-Ruwaard: Wageningen Agricultural University. Van Wassenhove and Gabel: INSEAD. Weaver: University of Durham. SR INSEAD, Working Papers: 95/71/TM/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 20. PR not available. JE K32, L73, Q23. KW Environmental Policy. Pulp and Paper. Life Cycle. Optimization. Recycling.

AB Will paper recycling reduce the environmental impact of the European pulp and paper sector? If so, is maximal paper recycling the best policy to optimize the life cycle of the pulp and paper sector? We explore these questions using an approach that combines materials accounting methods and optimization techniques. Environmental impact data are inputs for a linear programming network flow model to find optimal configurations for the sector. These configurations consist of a mix of different pulping technologies, a geographical distribution of pulp and paper production, and a level of recycling consistent with the lowest environmental impacts. We use the model to analyze scenarios with different recycling strategies. Recycling offers a reduction in environmental impact in regions with a high population and a large production of paper and board products. Regions with a large production of graphic products should focus on cleaner virgin pulp production with energy recovery. We conclude that relocation of paper production also offers a reduction in environmental impact. However, the severe effects of the economy make this policy less attractive than a combination of recycling, cleaner pulp production and energy recovery.

**Blundell, Richard**

PD October 1995. TI Market Share, Market Value and Innovation in a Panel of British Manufacturing Firms. AU Blundell, Richard; Griffith, Rachel; Van Reenen, John.

AA Blundell and Van Reenen: University College London and Institute for Fiscal Studies. Griffith: Institute for Fiscal Studies. SR University College London Discussion Paper: 95/19; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG 45. PR 3 Pounds; checks payable to Department of Economics, University College London. JE L13, O31, C25. KW Innovation. Market Value. Market Structure.

AB This paper combines information on stock market value, market structure and technological innovation to distinguish between strategic and "deep pockets" explanations of innovative activity. Using data on the observed count of technological innovations from a panel of UK manufacturing firms a dynamic model of innovation is implemented. Even after controlling for unobserved heterogeneity, it is found that high market share leads to higher expected numbers of innovations. Using information on financial structure and stock market valuation it is also argued that the relationship could be due to strategic considerations in the product market rather than purely financial factors. These results are consistent with the importance of the "efficiency effect" highlighted by Gilbert and Newbery (1982).

PD December 1995. TI Consumption and the Timing of Income Risk. AU Blundell, Richard; Stoker, Thomas. AA Blundell: University College London and Institute for Fiscal Studies. Stoker: Massachusetts Institute of Technology. SR University College London Discussion Paper: 95/21; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG 43. PR 3 Pounds; checks payable to Department of Economics, University College London. JE D91, D81. KW Precautionary Saving. Risks. Consumption.

AB When formulating a plan for savings, does the timing of income risks matter? Should one be concerned with whether uncertainty in income is in the near term, or the distant future? Of course, and the impact of the timing of income risk is the subject of this article. Using a three period framework, we provide approximate solutions for optimal consumption choices for preferences that display constant relative risk aversion and derive the relationship between innovations to income and innovations to consumption growth. These results are contrasted with those for quadratic preferences and preferences that display constant absolute risk aversion. We analyze consumption-saving plans for several different situations of near term and distant future income risk, and different kinds of preferences. We conclude with a demonstration of the high degree of accuracy of our consumption approximations by comparing them to exact values computed by stochastic simulation.

**Boero, G.**

TI Agreement and Disagreement Between Unit Root Tests. AU Ayat, K.L.; Boero, G.; Burridge, Peter; Sheldon, Marie.

**Boes, Dieter**

PD October 1994. TI The Hold-Up Problem in Government Contracting. AU Boes, Dieter; Luelfsmann, Christoph. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/457; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 25. PR no charge. JE D23, H57, L51. KW Procurement. Incomplete Contracts. Budget Constraints.

**AB** This paper considers a two-period procurement model in an incomplete- contract framework. In contrast to Hart-Moore (1988), the welfare- maximizing government, as buyer, is able to accomplish ex-ante optimal contracts which guarantee first-best specific investments of both buyer and seller. These contracts are precisely characterized. Regardless of the underlying supports of cost and benefit distributions renegotiation inevitably occurs in some states of nature. This renegotiation always increases the ex-ante fixed trade price. Hence, the empirical observation of soft budget constraints in government contracting can be rationalized. Furthermore, in accordance with common beliefs, the seller's rents accrue only at the production stage.

**PD** March 1995. **TI** Mass Privatization, Management Control and Efficiency. **AU** Boes, Dieter; Harms, Philipp. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/475; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 19. **PR** no charge. **JE** L33, P21. **KW** Privatization. Vouchers. Economic Reform.

**AB** We present a model where a government chooses the number of individuals to which ownership in a former state-owned firm shall be allocated. When making this decision the government maximizes the political support it gets from the firm's incumbent manager and from potential shareholders, anticipating that a greater dispersion of shares reduces the control of the manager by the firm's new owners. It turns out that shares will be allocated to the maximum number of individuals- and thus a policy of mass privatization will be implemented-if the manager's utility enters the political support functions with a higher weight than the welfare of the potential shareholders. The result of the political process, however, need not conflict with the objective of achieving a Pareto-optimal allocation. Thus we contradict a widely shared presumption that mass privatization schemes sacrifice efficiency to satisfy political constraints and show that they can be very attractive from an efficiency point of view.

### **Boltho, Andrea**

**PD** June 1994. **TI** Convergence, Competitiveness and the Exchange Rate. **AA** University of Oxford. **SR** Centre for Economic Policy Research, Discussion Paper: 970; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 29. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F43, N14. **KW** Exchange Rates. Competitiveness. Bretton Woods. Trade Liberalization.

**AB** Standard theory predicts that exchange rate changes have merely temporary real effects. Yet, if the higher profits that a devaluation ensures are used to improve non-price competitiveness, longer-run effects are possible. The paper looks at the experience of Germany, Spain, France and Italy which, in the 1950s and 1960s, either benefited from low parities or devalued their currencies. Favorable exchange rates probably contributed to these countries' rapid growth, but so did trade liberalization. In today's Europe the scope for further trade liberalization is limited while the uncertainties introduced by floating exchange rates make successful devaluations less likely.

### **Bonser-Neal, Catherine**

**PD** April 1995. **TI** Central Bank Intervention and the

Volatility of Foreign Exchange Rates: Evidence from the Options Market. **AU** Bonser-Neal, Catherine; Tanner, Glenn. **AA** Bonser-Neal: Federal Reserve Bank of Kansas City. Tanner: University of Washington. **SR** Federal Reserve Bank of Kansas City, Research Working Paper: 95/04; Research Division, Federal Reserve Bank of Kansas City, 925 Grand Blvd., Kansas City, MO 64198. **PG** 26. **PR** no charge. **JE** F31, E58. **KW** Foreign Exchange. Central Bank Intervention. Options Market.

**AB** This paper tests the effects of central bank intervention on the ex ante volatility of \$/DM and \$/Yen exchange rates. In contrast to previous research which employed GARCH estimates of conditional volatility, we estimate ex ante volatility using the implied volatilities of currency options prices. We also control for the effects of other macroeconomic announcements. We find little support for the hypothesis that central bank intervention decreased expected exchange rate volatility between 1985 and 1991. Federal Reserve intervention was generally associated with a positive change in ex ante \$/DM and \$/Yen volatility, or with no change. Perceived Bundesbank intervention did not alter \$/DM ex ante volatility in any of the periods, while perceived Bank of Japan intervention was associated with positive changes in ex ante \$/Yen volatility during the 1985-91 period as a whole and during the February 1987 to December 1989 post-Louvre Accord subperiod.

### **Booth, Alison L.**

**PD** July 1994. **TI** Seniority, Earnings and Unions. **AU** Booth, Alison L.; Frank, Jeff. **AA** Birkbeck College. **SR** Centre for Economic Policy Research, Discussion Paper: 1007; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 14. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** J31, J33, J51. **KW** Seniority. Wage Scales. Trade Unions. Earnings. Monopoly Union Models.

**AB** This paper uses a new data source to investigate whether wages rise more with seniority in unionized or non-unionized workplaces. The data distinguish workers who are covered by incremental wage scales with automatic progression by seniority. For union workers with seniority scales, the union wage differential increases with seniority. This is not the case for union workers without seniority scales. Taking account of this heterogeneity, we are able to reconcile previous paradoxical empirical findings. The results provide support for discriminating monopoly models of the trade union and have important efficiency and distributional implications.

### **Borensztein, Eduardo**

**PD** March 1995. **TI** How Does Foreign Direct Investment Affect Economic Growth? **AU** Borensztein, Eduardo; De Gregorio, Jose; Lee, Jong-Wha. **AA** Borensztein and De Gregorio: International Monetary Fund. Lee: Korea University and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5057; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 20. **PR** \$5.00. **JE** F21, O47, O16. **KW** Foreign Investment. Growth. Developing Markets.

**AB** We test the effect of foreign direct investment (FDI) on economic growth in a cross-country regression framework, utilizing data on FDI flows from industrial countries to 69 developing countries over the last two decades. Our results

suggest that FDI is an important vehicle for the transfer of technology, contributing relatively more to growth than domestic investment. However, the higher productivity of FDI holds only when the host country has a minimum threshold stock of human capital. In addition, FDI has the effect of increasing total investment in the economy more than one for one, which suggests the predominance of complementarity effects with domestic firms.

#### **Bossert, Walter**

TI Birth-Date Dependent Population Ethics: Critical-Level Principles. AU Blackorby, Charles; Bossert, Walter.

TI Income Inequality Measurement: The Normative Approach. AU Blackorby, Charles; Bossert, Walter; Donaldson, David.

TI Intertemporally Consistent Population Ethics: Birth-Date Dependent Classical Principles. AU Blackorby, Charles; Bossert, Walter; Donaldson, David.

PD October 1995. TI Welfarist Solutions for Allocation Problems With Indivisibilities. AA University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 95/39; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 21. PR 20 cents per page Canadian to other than educational institutions. JE D63, D71, D30. KW Welfarist Allocation Mechanisms. Indivisibilities. Rational Choice.

AB This paper characterizes solutions for allocation problems with indivisibilities that can be rationalized by social-welfare orderings on the agents' utility vectors. Unlike most earlier contributions (which mainly focus on the existence of envy-free allocations), the approach chosen in this paper is welfarist because allocations are compared solely on the basis of the utilities enjoyed by the individuals involved in the problem. The presence of an indivisible commodity leads to a framework where the domain of the choice function that selects allocations differs from the standard domains that are usually analyzed in the theory of rational choice.

TI Uncertainty and Critical-Level Population Principles: A Static Model. AU Blackorby, Charles; Bossert, Walter; Donaldson, David.

#### **Boswijk, Peter**

PD February 1996. TI Multiple Unit Roots in Periodic Autoregression. AU Boswijk, Peter; Franses, Philip Hans; Haldrup, Niels. AA Boswijk: University of Amsterdam. Franses: University Rotterdam. Haldrup: University of Aarhus. SR University of Aarhus, Department of Economics, Memo: 1996/2; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK/8000 Aarhus C, DENMARK. PG 30. PR no charge. JE C12, C22, C51, C52. KW Time Series Modeling. Periodic Integration. Seasonal Unit Root. Double Unit Root.

AB In this paper we propose a model selection strategy for a univariate periodic autoregressive time series which involves tests for one or more unit roots and for parameter restrictions corresponding to seasonal unit roots and multiple unit roots at the zero frequency. Examples of models that are considered are variants of the seasonal unit roots model and the periodic integration model. We show that the asymptotic distributions of various statistics are the same as well-known distributions

which are already tabulated. We apply our strategy to three empirical series to illustrate its ease of use. We find that evidence for seasonal unit roots based on nonperiodic models disappears when periodic representations are considered.

#### **Bottazzi, Jean-Marc**

PD March 1995. TI Market Demand Functions in the CAPM. AU Bottazzi, Jean-Marc; Hens, Thorsten; Loeffler, Andras. AA Bottazzi: University of Paris. Hens: University of Bonn. Loeffler: Free University. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/468; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrass 37, D53113, Bonn 1, DEUTSCHLAND. PG 13. PR no charge. JE C62, D51, G12. KW CAPM. Market Demand. Multiple Equilibria.

AB We demonstrate that in a CAPM economy, Walras's Law and the Tobin Separation Property characterize market demand on finite sets of prices. Consequently, for any number  $n$  there exist CAPM economies which have at least  $n$  equilibria and hence have  $n$  different beta pricing formulas. It is shown that the lower bound on the number of equilibria,  $n$ , is robust to perturbations of endowments.

PD November 1995. TI Smooth Returns in a Multiperiod Economy with Incomplete Markets. AA Universite Paris I and University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/495; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrass 37, D53113, Bonn 1, DEUTSCHLAND. PG 20. PR no charge. JE D52, G12. KW Incomplete Markets. Existence. Multiperiod Economy.

AB In a multiperiod economy with incomplete markets and assets that yield smooth functions of the commodity price history we show in order to get endowment generic existence of an equilibrium one need not alter essential features of asset description. Such features include the date of issue, the payment dates of coupons or dividends (if applicable), and the maturation date. A generic class of asset structures respecting these structural features of assets is introduced.

#### **Bouchet, Andre**

PD May 1995. TI The Delta-Sum of Matching Delta-Matroids. AU Bouchet, Andre; Schwaerzler, Werner. AA Bouchet: Universite du Maine. Schwaerzler: University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: 95845; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrass 37, D53113, Bonn 1, DEUTSCHLAND. PG 14. PR no charge. JE C44, C61. KW Delta Matroids. Delta Sum. Jump Systems. Polyhedral Rank Function.

AB We discuss a composition operation of delta-matroids, called delta-sum, in relation to similar compositions of related combinatorial structures like matroids and jump systems. The delta-sum of matching delta-matroids is associated with the linking of a graph. We exhibit a min-max formula for the polyhedral rank function of that delta-matroid, which implies a result of Gallai on linkings.

#### **Bover, Olympia**

PD 1994. TI Durable Consumption and House Purchases: Evidence From Spanish Panel Data. AU Bover, Olympia; Estrada, Angel. AA Banco de Espana. SR Banco de Espana Documento de Trabajo: 9411; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala,

50, 28014 Madrid. PG 36. PR not available. JE E21, R21. KW Durable Consumption. Housing Demand.

AB In this paper we specify and estimate Euler equations for durable expenditure with house purchase effects which are interpreted as capturing the influence of housing decisions on the intertemporal allocation of durable expenditure. We use household panel data obtained from the Spanish Family Expenditure Survey (1985.I to 1991.IV). Our results indicate that there is a significant effect of main residence purchases on durable expenditure, the former being associated with around a tenfold increase in durable expenditure. We believe this result is relevant in explaining the consumption increase in the 80's in Spain, given the increased demand for owner-occupied housing at the time.

PD 1994. TI Female Labour Force Participation in the 1980's: The Case of Spain. AU Bover, Olympia; Arellano, Manuel. AA Banco de Espana. SR Banco de Espana Documento de Trabajo: 9427; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. PG 44. PR not available. JE J16, J21, J23, J31. KW Skilled Labor. Labor Force. Female Workforce.

AB This paper is motivated by the large increase in the labor force participation of prime age women that, like in many other countries, took place in Spain during the last decade. We develop an empirical time series participation equation for women aged 25-44 in which education and fertility are treated as endogenous variables. We regard participation, education and fertility as variables that jointly respond to changes in the demand for skilled non-physical labor and the wage structure. Although we find a significant business cycle effect on participation, we conclude that the dominant forces determining the increase in participation during the sample period were structural factors that shifted female earnings potential.

#### Bowman, D.

PD February 1995. TI Order of Entry as a Moderator of the Effect of the Marketing Mix on Market Share. AU Bowman, D.; Gatignon, Hubert. AA Bowman: Purdue University. Gatignon: INSEAD. SR INSEAD, Working Papers: 95/26/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 34. PR not available. JE L22, L60. KW Marketing Mix. Competitive Strategy. Market Share.

AB Order of entry has been demonstrated to have a significant effect on market share. A number of explanations for this effect has been suggested in the marketing and strategy literatures. In this study, we investigate the influence of order of entry into a market on the effectiveness of a firm's marketing mix decisions. We test for asymmetries in the market response of early entrants versus late entrants using data from two durables (automotive) and three nondurables categories. A market share attraction model is developed where the parameters vary as a function of order of entry. Results show that asymmetries in the effectiveness of a brand's marketing mix variables are an essential source of order-of-entry effects.

#### Brander, James A.

PD August 1995. TI Open Access Renewable Resources: Trade and Trade Policy in a Two-Country Model. AU Brander, James A.; Taylor, M. Scott. AA University of British Columbia. SR University of British Columbia,

Department of Economics Discussion Paper: 95/24; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 31. PR 20 cents per page Canadian to other than educational institutions. JE F13, Q28, D60. KW International Trade. Renewable Resources. Environment. AB This paper develops a two-good, two-country model with national open access renewable resources. We derive an appropriate analog of "factor proportions" for the renewable resource case and link it to trade patterns and to the likelihood of diversified production. The resource importer gains from trade. However, a diversified resource exporting country necessarily suffers a decline in steady state utility resulting from trade, and may lose along the entire transition path. Thus the basic "gains from trade" presumption is substantially undermined by open access resources. Tariffs imposed by the resource importing country always benefit the resource exporter, and may be pareto-improving.

PD February 1996. TI The Simple Economics of Easter Island: A Ricardo-Malthus Model of Renewable Resource Use. AU Brander, James A.; Taylor, M. Scott. AA University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 96/08; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 42. PR 20 cents per page Canadian to other than educational institutions. JE N10, O11, Q21. KW Development. Natural Resources. Economic History.

AB We present a simple model of renewable resource and population dynamics that offers a plausible explanation for the rise and fall of the Easter Island civilization. Our simple general equilibrium model generates a dynamic system that is similar to the Lotka-Volterra predator-prey model. In our formulation, man is the predator and the resource base is the "prey". Starting from a given initial condition, economic development can follow a feast and famine cycle of alternatively rising and then falling population and resource stocks. Cyclical behavior is not a necessary outcome, but boom and bust cycles will tend to arise in societies where fertility is high, the resource base is slowly growing, and the technology for resource harvesting is relatively efficient. We speculate that such cycles may be a recipe for violent conflict over resource use.

#### Brenton, Paul

PD October 1995. TI Estimates of the Demand for Energy Using Cross-Country Consumption Data. AA University of Birmingham. SR University of Birmingham, Department of Economics, Discussion Paper: 95/25; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. PG 26. PR 2 pounds. JE Q41, O13. KW Energy. Elasticity of Demand. International Comparisons.

AB Using cross country consumption data we estimate a system of demand equations in a piecewise manner to investigate whether price and expenditure elasticities for energy differ between broad groups of countries. The empirical results reject the assumption of constant parameters across regimes of poor and rich countries. The derived elasticities suggest that the own price elasticity for energy is higher in poor than in rich countries. We find no evidence for the commonly held view that expenditure elasticities for energy decline with income.

TI Disaggregation in Flexible Demand Systems: the Block-AIDS. AU Bailey, Ralph W.; Brenton, Paul.

### Broadberry, Stephen N.

PD October 1994. TI Human Capital and Productivity in Manufacturing during the Twentieth Century: Britain, Germany and the United States. AU Broadberry, Stephen N.; Wagner, Karin. AA Broadberry: University of Warwick. Wagner: WZB. SR Centre for Economic Policy Research, Discussion Paper: 1036; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 25. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE J24, N32, N34, O52. KW Human Capital. Productivity. Manufacturing.

AB In this paper we relate trends in the accumulation of human capital in Britain, Germany and the United States to overall production strategy and productivity trends. In the United States a strategy of standardized mass production led to high levels of labor productivity and concentration on the development of managerial capabilities, but neglect of the skills of the shop-floor labor force, while in Britain and Germany concentration on craft production led to greater emphasis on shop-floor skills. After the Second World War, however, British firms made an unsuccessful move towards standardized mass production. Since shop-floor skills were neglected, British firms were left in a weak position to take advantage of the recent switch of technological leadership away from American mass production methods to German modern craft production or "flexible production" methods, intensive in the use of skilled shop-floor labor within a small batch industrial environment. British manufacturing also adopted an American style "mission oriented" approach to research and development in contrast to the German style "diffusion oriented" approach, which helped to reinforce the move away from craft production. Since the 1980s, Britain has returned to a more skilled labor intensive strategy but still has a large skills gap to make good.

### Brooks, Robert D.

PD February 1995. TI Combining Choice Set Partition Tests for the Independence of Irrelevant Alternatives Properties: Size Properties in the Four Alternatives Setting. AU Brooks, Robert D.; Fry, Tim R.L.; Harris, Mark N. AA Brooks: Royal Melbourne Institute of Technology. Fry and Harris: Monash University. SR Monash University, Department of Econometrics Working Paper: 1/95; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. PG 8. PR no charge. JE C12, C15, C25. KW Hypothesis Testing. Independence of Irrelevant Alternatives. Logit Model. Monte Carlo Method.

AB This paper conducts a Monte Carlo analysis of the size properties of combining choice set partition tests of the independence of irrelevant alternatives property in the Logit model in the four alternatives setting. Most of the tests have poor size properties. The exception is a version of the test proposed by Small and Hsiao (1995).

PD February 1995. TI The Size and Power Properties of Combining Choice Set Partition Tests for the IIA Property in the Logit Model. AU Brooks, Robert D.; Fry, Tim R.L.; Harris, Mark N. AA Brooks: Royal Melbourne Institute of Technology. Fry and Harris: Monash University. SR Monash University, Department of Econometrics Working Paper: 2/95; Department of Econometrics, Monash

University, Clayton, Victoria 3168, AUSTRALIA. PG 28. PR no charge. JE C12, C15, C25. KW Hypothesis Testing. Independence of Irrelevant Alternatives. Logit Model. AB This paper conducts a Monte Carlo analysis of the size and power properties of combining choice set partition tests of the IIA property of the Logit model. On the basis of this comparison we recommend that applied researchers testing for IIA calculate all versions of the McFadden, Train and Tye (1981) test and reject IIA if any single test rejects IIA.

### Browning, Martin

PD January 1996. TI Household Saving: Micro Theories and Micro Facts. AU Browning, Martin; Lusardi, Annamaria. AA Browning: University of Copenhagen and McMaster University. Lusardi: Dartmouth College. SR University of Copenhagen, Institute of Economics, Discussion Paper: 96/01; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. PG 96. PR not available. JE E21, D91. KW Consumption. Saving. US Savings Rate.

AB This survey presents theories and facts concerning saving. There is a sharp dichotomy in the saving literature between the two. Although the theory is sophisticated and flexible, it is a theory of consumption; saving is simply the residual between income and current consumption. Thus the intertemporal allocation theory has led to a large empirical literature on consumption. By contrast, most of the empirical work on saving itself is descriptive and is relatively atheoretical. Unfortunately the two strands of the literature are very imperfectly interwoven.

### Brunello, Giorgio

PD June 1994. TI Earnings and Seniority in Japan: A Re-Appraisal of the Existing Evidence and a Comparison with the UK. AU Brunello, Giorgio; Ariga, Kenn. AA Brunello: University of Venice. Ariga: Kyoto University. SR Centre for Economic Policy Research, Discussion Paper: 974; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 17. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE J31, J33, J41, P52. KW Tenure. Seniority Wages. Earnings. Japan. UK.

AB Standard estimates of earnings profiles ignore the fact that, with unobserved heterogeneity, cross-section evidence need not reflect the "true" relationship between earnings and tenure. In this paper we argue that the observation of the position filled by an employee in the firm hierarchy is informative about both his/her quality and the quality of his/her match. Under certain assumptions, this information can be used to construct an unbiased estimator of the effects of tenure on earnings growth. We apply this simple idea to Japanese and UK data. We find that tenure effects on earnings are positive but smaller than the effects estimated with the traditional approach. In a comparative perspective, we also find that UK and Japanese earnings profiles are rather similar in banking and finance and remarkably different in manufacturing.

### Brunt, Liam

PD December 1995. TI Turning Water Into Wine: New Methods of Calculating Farm Output and New Insights Into Rising Crop Yields During the Agricultural Revolution. AA Nuffield College, Oxford. SR University of Oxford, Discussion Papers in Economic and Social History: 2; Avner

Offer, Nuffield College, Oxford, OX1 1NF. PG 26. PR not available. JE Q13, Q14. KW Crop Comparison. Agriculture.

AB Constructing an agricultural output series requires a rational economic basis on which to convert one crop into another and a conversion method using only the information which we have at our disposal. The traditional method fails on both counts. We develop two alternative methods. The first is extremely parsimonious but imprecise; the second is less parsimonious but allows us to isolate the effect of different crop rotations on wheat yields. We compare the three methods using the farm dataset compiled by Arthur Young on his tours of England and Wales during the Agricultural Revolution and we show that new fallow crops substantially increased the wheat yield.

### Buckberg, Elaine

PD January 1996. TI Institutional Investors and Asset Pricing in Emerging Markets. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 96/2; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 16. PR not available. JE G11, G12, G15. KW Mexico. Asset Pricing. Developing Markets.

AB This paper presents a new theory of asset pricing intended to address why other developing country equity markets responded so strongly to the Mexican devaluation, while the world's major stock markets were unmoved. This phenomenon can be explained if investors follow a two-step portfolio allocation process, first determining what share of their portfolio to invest in developing countries, then allocating those funds across the emerging markets. For 12 of 13 markets studied, the one-factor CAPM is rejected in favor of a two-factor asset pricing model, including both a broad emerging markets portfolio and the global market portfolio.

### Bufman, Gil

TI Financial Reform in Israel: A Case of Gradualism. AU Leiderman, Leonardo; Bufman, Gil.

### Bulkley, George

PD July 1995. TI Irrational Analysts' Expectations as a Cause of Excess Volatility in Stock Prices. AU Bulkley, George; Harris, Richard. AA University of Exeter. SR University of Exeter, Department of Economics Discussion Paper: 96/08; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 19. PR no charge. JE C33, D84, G14. KW Volatility. Earnings Expectations. Panel Data. Rational Expectations.

AB This paper investigates whether excess stock price volatility may be due in part to a failure of the market to form rational expectations. Using data on analysts' expectations of long run earnings growth for individual companies, we report a number of interrelated results which lend support to this hypothesis. First we show that there is no statistically significant relationship between analysts' long run forecasts and subsequent earnings growth, suggesting that analysts' earnings expectations are excessively dispersed. Secondly, we provide evidence that analysts' expectations are reflected in market prices. These two results together imply that the cross-section of stock prices will also be excessively dispersed, so that stocks with low earnings expectations are underpriced and

stocks with high earnings expectations are overpriced. As analysts' forecasts errors become apparent, stock prices should adjust accordingly and so excess returns should accrue. We demonstrate that analysts' forecasts are indeed negatively correlated with subsequent excess returns. All hypothesis testing uses panel regression techniques, and to circumvent the problem of cross-sectional dependence in the data we use a generalized method of moments estimator of the parameter covariance matrix.

PD March 1996. TI Why Does the Ratio of Book to Market Value of Equity Explain Cross-Section Stock Returns? AU Bulkley, George; Harris, Richard. AA University of Exeter. SR University of Exeter, Department of Economics Discussion Paper: 96/09; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 11. PR no charge. JE C33, G14. KW Book to Market. Cross-Section Returns. Panel Data.

AB A number of papers have reported evidence that cross-section stock returns can be explained by the ratio of the book value of companies' assets to their market value. The unresolved issue, which we address here, is whether this evidence is consistent with the efficient markets hypothesis. We argue that the efficient markets model, which implies that book to market is a proxy for risk, implies also that it is a noisy proxy. This same model also presents a way to clean up this variable so that it explains stock returns more successfully. Removing the noise from book to market in this way should improve its explanatory power under the efficient markets hypothesis, while under the alternative hypothesis of irrational pricing it should cause its explanatory power to deteriorate. We present evidence in this paper that its explanatory power deteriorates.

### Burda, Michael C.

PD June 1994. TI Structural Change and Unemployment in Central and Eastern Europe: Some Key Issues. AA Humboldt Universität zu Berlin. SR Centre for Economic Policy Research, Discussion Paper: 977; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 17. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE J21, J64, O15. KW Central Europe. Eastern Europe. Labor Markets. Economic Reform. Unemployment.

AB Labor markets in Central and Eastern Europe (CEE) will be a key vehicle for the expression and reallocation of skills and talents in the transformation process. To a large extent, the emergence of unemployment is an indicator of this restructuring and reallocation. This paper surveys some of the issues involved in the rise of CEE unemployment as well as the policy options available for dealing with it. Specifically, the paper looks at reallocation of human resources across industries, occupations, space, and labor market states. The matching function is proposed as one possible device for summarizing and studying these developments. The paper briefly evaluates current labor market policies in the CEE economies in this light.

PD September 1994. TI Locational Competition versus Cooperation in Labour Markets: An Implicit Contract Reinterpretation. AU Burda, Michael C.; Mertens, Antje. AA Humboldt Universität zu Berlin. SR Centre for Economic Policy Research, Discussion Paper: 1020; Centre for



Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 22. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE J31, J41, J61. KW Wage Differentials. Implicit Contracts. Trade Unions. Mobility.

AB The need for locational competition among labor markets arises when labor is immobile. At the same time market clearing under such conditions can lead to wage and income variability. In such cases demand for insurance against regional shocks arises, which can be provided by nationwide collective bargaining and other national institutions in the spirit of the implicit contract literature. In this interpretation, the desirability of locational competition depends on the nature of shocks which affect the regions. Real wage and other types of flexibility will be invoked by localities only in response to systematic shocks. We present evidence that West German and other European experiences are more consistent with an insurance contract interpretation, while US regional labor markets are characterized by high regional mobility, rendering insurance less relevant.

### Burdett, Kenneth

TI Temporal Aggregation Bias in Stock-Flow Models. AU Coles, Melvyn G.; Burdett, Kenneth; Ours, Jan van.

PD October 1995. TI The Low Skill Trap. AU Burdett, Kenneth; Smith, Eric. AA Burdett: University of Essex. Smith: University of British Columbia and University of Essex. SR University of British Columbia, Department of Economics Discussion Paper: 95/40; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 16. PR 20 cents per page Canadian to other than educational institutions. JE J64, J24. KW Search and Matching. Training. Coordination Failure.

AB This paper demonstrates how matching frictions can generate a skills trap. If it takes time for an unemployed worker to contact a firm and vice-versa, an employer may hire a worker who does not yield the greatest expected profit rather than wait. If the most desirable workers are the most skilled, then the higher the percentage of trained workers, the greater the expected profit from posting a vacancy. Higher profits create higher entry and more vacancies. Conversely, the greater the number of vacancies, the greater the expected return to training. This reasoning suggests that multiple Pareto rankable equilibria can exist.

### Burridge, Peter

PD May 1995. TI The Limit Distribution of Level Crossings of a Random Walk, and a Simple Unit Root Test. AU Burridge, Peter; Guerre, Emmanuel. AA Burridge: University of Birmingham. Guerre: LSTA, CREST and Universite de P and M Curie. SR University of Birmingham, Department of Economics, Discussion Paper: 95/19; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. PG 34. PR 2 pounds. JE C14, C22. KW Level Crossings. Unit Roots.

AB We derive the limit distribution of the number of crossings of a level by a random walk with continuously distributed increments, using a Brownian Motion local time approximation. This complements the well-known result for the random walk on the integers. Use of the frequency of level crossings to test for a unit root is examined.

TI Agreement and Disagreement Between Unit Root Tests. AU Ayat, K.L.; Boero, G.; Burridge, Peter; Sheldon, Marie.

### Cadot, Olivier

PD August 1994. TI The Europe Agreements and EC-LDC Relations. AU Cadot, Olivier; De Melo, Jaime. AA Cadot: INSEAD. De Melo: Universite de Geneve. SR Centre for Economic Policy Research, Discussion Paper: 1001; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 23. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F13, F14, F15. KW North/South Trade Relations. Foreign Aid. Integration.

AB The paper considers the implications of recent changes in the EC relationship with the Central and East European countries (CEECs) for the EC's traditional links with African, Caribbean and Pacific (ACP) countries. After reviewing some important aspects of the trade regime signed in 1991 between the EC and the CEECs, showing that they give only marginal trade preferences to the CEECs. The paper also considers foreign direct investment and aid flows and argues that there is little evidence to date of a massive redirection of the flow of funds from the EC to the CEECs and away from the ACP countries.

PD October 1994. TI France and the CEECs: Adjusting to Another Enlargement. AU Cadot, Olivier; De Melo, Jaime. AA Cadot: INSEAD. De Melo: Universite de Geneve. SR Centre for Economic Policy Research, Discussion Paper: 1049; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 27. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F14, F15, F16. KW Economic Integration. Trade Protection. France. Central Europe. Eastern Europe.

AB The paper considers the effects of trade expansion between the EU and the Central and East European Countries (CEECs) on France. Taking a political-economy perspective, we attempt to detect potential demand for protection at the sectoral and regional level. Recent aggregate figures for trade and direct investment are reviewed, showing that French trade relations with the CEECs have as yet failed to expand by as much as a simple gravity relationship would predict, while French direct investment in the area remains small. The paper then considers disaggregated trade data; simple trade expansion simulations are carried out suggesting that job creation and destruction at the regional level is likely to be marginal. The paper closes by drawing a comparison with France's adjustment to the EU's 1986 Southern enlargement (to Spain and Portugal), showing that fears of job losses turned out in that case to be largely unfounded, while Spain attracted significant amounts of French direct investment.

PD February 1995. TI Barriers to Imitation and the Incentive to Innovate. AU Cadot, Olivier; Lippman, S.A. AA Cadot: INSEAD. Lippman: University of California, Los Angeles. SR INSEAD, Working Papers: 95/23/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 27. PR not available. JE O30, O31. KW Innovation. Imitation. Entry Deterrence.

AB When innovation is followed by imitator entry, the degree to which the innovator can appropriate the rents induced by its innovations influences the rate of innovative activity. Our interest focuses upon the interaction between the rate of innovative activity and the length of the delay between the

innovative and imitation, in a model in which innovative activity generates a sequence of new innovations in the face of market saturation and discounting. The optimal rate of innovation depends upon our distinct economic forces: the appropriability effect stressed in the literature, fighting market saturation, a competitive motivation (to maintain the monopoly position), and a strategic motivation (to deter entry). The goal of our analysis is to elicit the circumstances in which each force dominates. Because of these countervailing forces, the optimal rate of innovation may not be monotone in the delay; furthermore, a more easily saturated market can benefit the innovator.

### Caglayan, Mustafa

TI Monetary Instability, the Predictability of Prices and the Allocation of Investment: An Empirical Investigation Using UK Panel Data. AU Beaudry, Paul; Caglayan, Mustafa; Schiantarelli, Fabio.

### Canonero, Gustavo

PD November 1995. TI Spain: Unemployment, Debt Management, and Interest Rate Differentials. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/107; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 26. PR not available. JE E43, E44, F31, H63. KW Credible Commitment. Spain.

AB This paper is about the market's assessment of the Spanish authorities' policy commitment as reflected in the interest rate premium. It focuses on two particular aspects of the Spanish economy that may be acting as constraints to the authorities' policy credibility: the high unemployment rate and the pursued lengthening of the maturity of the debt. The evidence presented provides support to the view that policy credibility in Spain is not only a question of policymaker's type, but also of policy viability, which is considerably limited by massive unemployment. However, no conclusive evidence is found in regard to the effect of debt maturity.

### Canoy, Marcel

PD January 1995. TI The Differentiation Triangle. AU Canoy, Marcel; Peitz, Martin. AA Canoy: Catholic University of Leuven and Limburg University. Peitz: University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/478; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 37. PR no charge. JE L13, L15. KW Product Differentiation. Product Design. Multi-Product Competition.

AB The paper formalizes the observation that submarkets for high-quality and low-quality variants are markedly different from each other. We study a simple model where variants in the low-quality range are identical for every customer, whereas customers strongly disagree about the value of variants in the high-quality segment. We determine the outcome under price competition in the differentiation triangle with sequential entry when each firm can develop the full vertical product line or decide to follow a niche strategy, i.e. to develop only one variant.

### Card, David

PD March 1995. TI Is Workers' Compensation Covering Uninsured Medical Costs? Evidence from the "Monday Effect".

AU Card, David; McCall, Brian P. AA Card: Princeton University and National Bureau of Economic Research. McCall: University of Minnesota. SR National Bureau of Economic Research, Working Paper: 5058; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 26. PR \$5.00. JE J32, I11, I18. KW Monday Effect. Health Insurance. Worker's Compensation.

AB Steady increases in the costs of medical care, coupled with a rise in the fraction of workers who lack medical care insurance, have led to a growing concern that the Workers' Compensation system is paying for off-the-job injuries. Many analysts have interpreted the high rate of Monday injuries -- especially for hard-to-monitor injuries like back sprains -- as evidence of this phenomenon. In this paper, we propose a test of the hypothesis that higher Monday injury rates are due to fraudulent claims. Specifically, we compare the daily injury patterns for workers who are more and less likely to have medical insurance coverage, and the corresponding differences in the fraction of injury claims that are disputed by employers. Contrary to expectations, we find that workers without medical coverage are no more likely to report a Monday injury than other workers. Similarly, employers are no more likely to challenge a Monday injury claim -- even for workers who lack medical insurance.

### Carlin, Wendy

PD September 1995. TI Enterprise Restructuring in Early Transition: The Case Study Evidence From Central and Eastern Europe. AU Carlin, Wendy; Van Reenen, John; Wolfe, Toby. AA Carlin: University College London and WZB Berlin. Van Reenen: University College London and Institute of Fiscal Studies. Wolfe: University College London. SR University College London Discussion Paper: 95/14; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG 27. PR 3 Pounds; checks payable to Department of Economics, University College London. JE 012, 017, P52, P21. KW Restructuring. Eastern Europe. Case Study.

AB Recent empirical and theoretical work on the transitional economies has emphasized the importance of internal bargaining and incentives. This paper constitutes an attempt to systematize the large body of case studies of enterprise restructuring in Poland, Hungary, Slovakia, Russia and the Czech Republic. It uses a framework in which the incentives and constraints on managers are crucial for the success of transforming enterprises into value maximizing firms. The forms of, and the constraints on, active behavior are examined for each enterprise across the dimensions of internal organization, product and labor markets and investment. Although there is widespread evidence of enterprise managers reacting to the post-reform environment, examples of deep restructuring are rare. Managers are hamstrung by weak incentives and employee opposition, as well as by the uneven development of social and market infrastructure external to the enterprise. The examination of pre-privatization behavior suggests that the pace and depth of restructuring would increase after privatization only when privatization clearly transforms the incentives and constraints facing managers. This is rare. The limited evidence on post-privatization restructuring surveyed here suggests that foreign ownership of a former state-owned enterprise is the exception in which privatization produces a marked change in behavior.

**Carranza, Luis**

PD December 1995. TI Credit Imperfections, Inequality and Economic Growth. AA University of Minnesota. SR University of Minnesota, Center for Economic Research, Discussion Paper: 286; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. PG 48. PR no charge. JE O16, E51, D92. KW Economic Development. Endogenous Credit Constraints. Growth Rate.

AB This paper presents a dynamic general equilibrium model to investigate the interaction of financial markets with economic growth, change of industry structure and the evolution of wealth across households along the development process. I find that in the early stages of development the economy experiences "extensive growth," in which the growth rates are increasing and the fraction of entrepreneurs is positively correlated to the level of aggregate output. The engine of growth in this stage comes from the reallocation of resources from low to high productivity sectors. In the middle and mature stages of development the economy experiences "intensive growth," that is, the fraction of entrepreneurs is negatively correlated with the level of output and the source of growth in these stages is the higher average productivity achieved by the competition among entrepreneurs. As a result, the growth rate could be increasing in the middle stage and then displays a decreasing pattern during the mature stage.

**Casella, Alessandra**

PD May 1994. TI Can Foreign Aid Accelerate Stabilization? AU Casella, Alessandra; Eichengreen, Barry. AA Casella: Columbia University. Eichengreen: University of California, Berkeley. SR Centre for Economic Policy Research, Discussion Paper: 961; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 21. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE E63, F35. KW Stabilization. Foreign Aid. Distributional Struggle.

AB This paper studies the effect of foreign aid on economic stabilization. Following Alesina and Drazen (1991), we model the delay in stabilizing as the result of a distributional struggle: reforms are postponed because they are costly and each distributional faction hopes to reduce its share of the cost by outlasting its opponents in obstructing the required policies. Since the delay is used to signal each faction's strength, the effect of the transfer depends on the role it plays in the release of information. We show that this role depends on the timing of the transfer: foreign aid decided and transferred sufficiently early into the game leads to earlier stabilization; but aid decided or transferred too late is destabilizing and encourages further postponement of reforms.

**Cashin, Paul**

PD November 1995. TI International Integration of Equity Markets and Contagion Effects. AU Cashin, Paul; Kumar, Manmohan S.; McDermott, John. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/110; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 27. PR not available. JE F36, G12, G15. KW Contagion Effects. Developing Markets. International Integration.

AB This paper investigates empirically the degree of international integration of industrial and emerging country equity markets. It analyzes two issues: first, the extent to which

equity prices have tended to move similarly across countries and regions in the long run; and second, the strength of cross-country "contagion" effects. The paper's findings suggest that both intra-regional and inter-regional linkages across national equity markets have strengthened in recent years. In addition, using impulse response functions, the paper shows that cross-country contagion effects of country-specific shocks dissipate in a matter of weeks while contagion effects of global shocks take several months to unwind themselves.

TI Consumption Smoothing and the Current Account: Evidence for France, 1970-94. AU Agenor, Pierre-Richard; Bismut, Claude; Cashin, Paul; McDermott, C. John.

**Cassiers, Isabelle**

PD July 1994. TI Economic Growth in Post-War Belgium. AU Cassiers, Isabelle; De Ville, Philippe; Solar, Peter M. AA Cassiers and De Ville: Universite Catholique de Louvain. Solar: Vrije Universiteit Brussel. SR Centre for Economic Policy Research, Discussion Paper: 986; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 41. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE N14, O47, O52. KW Belgium. Economic Growth.

AB The growth of the Belgian economy since 1945 is surveyed with emphasis on the distinction between open and sheltered sectors. Relatively slow growth to around 1960 is explained by a move away from traditionally liberal industrial policies that began in the crisis of the 1930s, by the squeeze on open sector firms' profits in the 1950s that arose from the conjunction of social pressures for higher wages and deflationary monetary policy, and by weaknesses in innovation and new product development attributable to the system of corporate control. The subsequent acceleration in growth resulted from increased internal competition and greater technological and organizational transfers, both associated with membership of the European Community and substantial foreign direct investment. From the mid-1970s productivity growth in the open sector remained high but its overall growth has been hindered by cost increases resulting from an increasingly dysfunctional system of wage and income determination and from the deterioration of public finances.

**Chadha, Bankim**

PD July 1994. TI Fiscal Constraints and the Speed of Transition. AU Chadha, Bankim; Coricelli, Fabrizio. AA Chadha: International Monetary Fund. Coricelli: University of Siena. SR Centre for Economic Policy Research, Discussion Paper: 993; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 26. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE E24, P21. KW Restructuring. Unemployment. Transition. Fiscal Constraints.

AB This paper develops a model of the process of reallocation of resources from a declining state sector to an expanding private sector. The transition is shown to be costly in that it entails unemployment and a deterioration of the fiscal balance. The interaction of fiscal constraints with the transition process is examined. It is shown that fiscal constraints may induce the government to maintain the state sector, slowing the speed of transition, and could jeopardize the eventual outcome of the process of restructuring.

**Chatterjee, Robin A.**

PD October 1995. TI The Financial Effects of Takeover: Accounting Rates of Return and Accounting Regulation. AU Chatterjee, Robin A.; Meeks, Geoffrey. AA University of Cambridge. SR University of Cambridge, Discussion Papers in Accounting and Finance: AF13; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 19. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE M41, C23. KW Takeover Performance. Accounting Regulation.

AB This paper outlines the contradictions and pitfalls of two literatures on the financial effects of takeover: one based on stock market returns, the other on accounting profitability. Focusing on the latter measure, a simple general model demonstrates the systematic distortions introduced by different accounting treatments of takeover associated with particular regulatory regimes. Then new estimates are reported of the effect of takeovers on accounting profitability among a population of UK companies in the period 1977-90. Sub-samples are segregated in an effort to quantify the impact of the 1964 introduction of SSAP 22 and SSAP 23.

PD October 1995. TI The Financial Performance of Companies Acquiring Very Large Takeover Targets. AA University of Cambridge. SR University of Cambridge, Discussion Papers in Accounting and Finance: AF14; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 18. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE G34, M41. KW Takeover Targets. Performance.

AB This paper focuses on some of the largest taken-over companies during the period from 1977 to 1990 and analyzes the performance of acquirers of these companies using Cumulative Abnormal Returns and accounting profits. Since these very large targets had been sheltered from the threat of takeover, they may well have developed especially large X inefficiency. The paper therefore asks whether such takeovers yield especially high performance improvements.

PD October 1995. TI Financial Innovations and the Size Effect in the Market for Corporate Control. AA University of Cambridge. SR University of Cambridge, Discussion Papers in Accounting and Finance: AF15.; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 22. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE G32, G34. KW Takeover. Company Size. Financial Innovation.

AB This paper is concerned with the role of takeovers in economic natural selection between 1977 and 1990. Previous work on this issue has concluded that, rather than profitability, it was company size which acted as the most powerful discriminator between taken-over firms and others. In particular, very large firms were relatively immune from takeover. The paper focuses on this immunity and asks whether it has survived the financial innovations of the 1980's, such as "junk bonds". Bivariate and multiple discriminant analyses indicate that for at least one period in the 1980s the size immunity was dramatically weakened.

**Chemmanur, Thomas J.**

PD March 1996. TI Why Include Warrants in New

Equity Issues? A Theory of Unit IPOs. AU Chemmanur, Thomas J.; Fulghieri, Paolo. AA Chemmanur: Columbia University. Fulghieri: INSEAD and Centre for Economic Policy Research. SR INSEAD, Working Papers: 96/12/FIN; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 36. PR not available. JE G11, G12, G13. KW Warrants. Equity Markets. Equity-Warrant Package. Under-Pricing.

AB We develop a theory of unit IPOs, in which the firm going public issues a package of equity with warrants. We model an equity market characterized by asymmetric information, where insiders have private information about the riskiness as well as the expected value of their firm's future cash flows. We demonstrate that, in equilibrium, high risk firms issue "units" of equity and warrants, and the package of equity and warrants is underpriced; lower risk firms, on the other hand, issue underpriced equity alone. An important feature of our model is that, in contrast to the existing literature, underpricing is used as a signal in equilibrium in the context of a one-shot equity offering. While the model is developed in the context of IPOs of equity, it is also applicable with minor modifications to the case of seasoned equity offerings packaged with warrants; further, the intuition behind the model generalizes readily to provide a new rationale for packaging call option like claims with other risky securities (e.g., convertible debt, debt with warrants) as well.

**Chennells, Lucy**

PD October 1995. TI Wages and Technology in British Plants: Do Workers Get a Fair Share of the Plunder? AU Chennells, Lucy; Van Reenen, John. AA Chennells: Institute of Fiscal Studies. Van Reenen: University College London and Institute of Fiscal Studies. SR University College London Discussion Paper: 95/17; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG 45. PR 3 Pounds; checks payable to Department of Economics, University College London. JE J31, O33. KW Wages. Technology. Endogeneity.

AB Many recent empirical studies have pointed to the higher wages enjoyed by workers in environments where new technologies are intensively used. An examination of the 1984 and 1990 plant-based British WIRS datasets reveals similar patterns. This paper argues that endogeneity bias is endemic in these results. Controlling for this endogeneity bias suggests that the estimated impact of new technologies on wages is severely upwards biased. The correlation in the data is driven by the fact that higher wages appear to give firms greater incentives to introduce new technologies. This seems consistent with the view that plants with stocks of high quality skilled workers are more able to adopt new technologies.

**Chick, Victoria**

PD September 1995. TI Multiplier and Finance. AA University of London. SR University College London Discussion Paper: 95/12; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG 28. PR 3 Pounds; checks payable to Department of Economics, University College London. JE E22, E12, E21. KW Multiplier. Finance. Funding. Keynes. Robertson.

AB The financial side of the multiplier has bothered few authors. By considering it, we can see that (a) the autonomous

expenditure which starts off the process must be financed by bank lending, as the only form of lending for which no prior saving is required, (b) that the role of saving is not to finance investment but to fund it. In the process of this exploration we re-enter the debate about the identity/equality of saving and investment and the role of process and equilibrium in the macroeconomics of Keynes.

**PD** September 1995. **TI** Finance and Investment in the Context of Development: A Post Keynesian Perspective. **AA** University College London. **SR** University College London Discussion Paper: 95/13; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. **PG** 16. **PR** 3 Pounds; checks payable to Department of Economics, University College London. **JE** O17, O16, G14, G20. **KW** Finance. Economic Development. Capital Markets.

**AB** Development economics is in the grip of the pre-Keynesian theory that the dynamics of investment are determined by the inadequacy, at home or abroad, of savings. This theory fails to acknowledge the institutional developments of incorporation, financial intermediation and all forms of credit, especially credit money. All of these institutions are well in place in almost all developing countries. The paper explores the micro- and macro-economics of financing and funding investment in the developing economy of today. The basic tools are those forged by Keynes, which acknowledge modern institutions. Credit, not saving, is the primary source of investment finance. Funding, rather than finance, is the more difficult problem in the underdeveloped countries.

#### Chou, Chien Fu

**TI** Redistribution and Growth: Pareto Improvements. **AU** Talmain, Gabriel; Chou, Chien Fu.

#### Christodoulakis, Nicos M

**PD** September 1994. **TI** Efficiency and Expectations Revisited: A Foreign Exchange Market with Bayesian Players. **AU** Christodoulakis, Nicos M; Kalyvitis, Sarantis C.; Karamouzis, Nicos V. **AA** Christodoulakis and Kalyvitis: Athens University of Economics and Business. Karamouzis: Hellenik Industrial Development Bank. **SR** Centre for Economic Policy Research, Discussion Paper: 1016; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 23. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F31, C11, D84. **KW** Efficiency. Unbiasedness. Devaluation. Expectations. Bayesian Learning.

**AB** This paper re-examines the efficiency hypothesis in the foreign exchange market. The traditional efficiency testing equations are reviewed and a model is developed that incorporates Bayesian revisions in the form of devaluation expectations. A number of propositions regarding the pattern of the coefficients in efficiency testing equations are established. The results are confirmed by the empirical estimation of the model for the Greek foreign exchange market.

#### Chung, Ching-Fan

**PD** July 1995. **TI** The Minimum Distance Estimator for Fractionally Integrated ARMA Models. **AU** Chung, Ching-Fan; Schmidt, Peter. **AA** Michigan State University. **SR** Michigan State University, Econometrics and Economic Theory Papers: 9408; Department of Economics, Michigan State University, East Lansing, Michigan 48824. **PG** 36.

**PR** not available. **JE** C15, C51. **KW** Long Memory. Fractional Differencing. Minimum Distance Estimation. Efficiency Comparison. Small Sample Properties.

**AB** We consider minimum distance estimation of the fractionally integrated ARMA process. The estimator minimizes the distance between functions of the sample and population autocorrelations. An appropriate choice of functions is necessary to yield an estimator that is the square root of T-consistent for values of the differencing parameter greater than or equal to 0.25. Monte Carlo simulations show that this estimator is less biased than other common estimators, such as the MLE, for values of the differencing parameter close to 0.5.

#### Churchill, N.

**TI** Entrepreneurial Transformation: A Descriptive Theory. **AU** Muzyka, Daniel F.; De Koning, Alice J.; Churchill, N.

#### Cicinskas, Jonas

**PD** December 1995. **TI** Trade Policies and Lithuania's Reintegration into the Global Economy. **AU** Cicinskas, Jonas; Cornelius, Peter K.; Treigienė, Dalia. **AA** Cicinskas: University of Vilnius. Cornelius and Dalia: International Monetary Fund. **SR** International Monetary Fund, Working Paper: 95/138; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 42. **PR** not available. **JE** F13, F14, P33. **KW** Lithuania. Economic Reform. International Trade.

**AB** The reintegration into the world economy has been an integral part of Lithuania's transformation process. Trade policy reform has been assigned a key role, aiming at opening up the economy and redirecting foreign trade. This paper (i) analyzes the trade shock following the dissolution of the former Soviet Union; (ii) studies the political economy of trade reforms; (iii) evaluates Lithuania's attempts to gain greater access to Western markets, in particular the European Union; and (iv) reviews the empirical evidence on redirecting foreign trade.

#### Clarida, Richard

**PD** June 1994. **TI** Sources of Real Exchange Rate Fluctuations: How Important are Nominal Shocks? **AU** Clarida, Richard; Gali, Jordi. **AA** Clarida: Council of Economic Advisors. Gali: Universitat Pompeu Fabra. **SR** Centre for Economic Policy Research, Discussion Paper: 951; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 47. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** C32, F31. **KW** Flexible Exchange Rates. Real Exchange Rate Fluctuations. Structural VAR. Permanent-Transitory Decomposition.

**AB** This paper attempts to identify the sources of real exchange rate fluctuations since the collapse of the Bretton Woods period. We use a structural VAR model with recursive long-run restrictions to decompose the real exchange rate series into three components, associated with supply, demand and monetary shocks. Our estimates imply that monetary shocks account for a substantial fraction of the variability of both yen and Deutschmark real exchange rate variations against the dollar. Demand shocks appear as the largest source of real exchange rate fluctuations for all the currencies considered, while supply shocks seem to play a minor role.

#### Clark, Todd E.

**PD** March 1995. **TI** Small Sample Properties of

Estimators on Non-Linear models of Covariance Structure. AA Federal Reserve Bank of Kansas City. SR Federal Reserve Bank of Kansas City, Research Working Paper: 95/01; Research Division, Federal Reserve Bank of Kansas City, 925 Grand Blvd., Kansas City, MO 64198. PG 46. PR no charge. JE C13, C15. KW Generalized Method of Moments. Maximum Likelihood Estimators. Covariance Structure. Monte Carlo.

AB This study examines the small sample properties of GMM and ML estimators of non-linear models of covariance structure. The study focuses on the properties of parameter estimates and the Hansen (1982) and Newey (1985) model specification test. It uses Monte Carlo simulations to consider the properties of estimates for some simple factor models, the Hall and Mishkin (1982) model of consumption and income changes, and a simple Bernanke (1986) decomposition model. This analysis establishes and seeks to explain a number of results. Most importantly, optimally weighted GMM estimation yields some biased parameter estimates, and GMM estimation yields a model specification test with size substantially greater than the asymptotic size.

#### Clavijo, Sergio

PD December 1995. TI A Survey of Economic Policies and Macroeconomic Performance in Chile and Colombia. 1970-95. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/139; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 22. PR not available. JE N16, O54, P52. KW Chile. Colombia. Economic Reform. Foreign Exchange.

AB This survey describes the timing and main macroeconomics results of the ambitious structural reforms adopted by Chile in the middle and late 1970s and by Colombia almost a decade later in the late 1980s and early 1990s. These reforms have enabled both countries to maintain vigorous real growth rates during the first part of the 1990s. However, they face challenges to their competitiveness as their real exchange rates continue to appreciate and real unit labor costs have been increasing. Although their exchange rate management system has helped to avoid an excessive inflow of short-term capital, interest rate differentials keep exerting pressures. Structural reforms have helped attract foreign direct investment, allowing the investment ratios of both countries to increase.

#### Coady, David

PD July 1995. TI Structural Adjustment and the Environmental and Natural Resource Base: A Synthesis. AA University College London. SR University College London Discussion Paper: 95/08; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG 43. PR 3 Pounds; checks payable to Department of Economics, University College London. JE O13, Q28, Q38. KW Structural Adjustment. Environmental Resources. Development.

AB This paper is concerned with the relationship between structural adjustment in developing countries and the efficient management and use of the environmental and natural resource base. The initial neglect in structural adjustment programs of the need for microeconomic adjustment, and the continued neglect of market, institutional and policy failures specific to the environment and natural resource sector, are discussed. Difficulties associated with the formulation of environmental policy, particularly in developing countries, are highlighted.

Arguments for a more "direct" focus on removing "distortions" in the environment and natural resource sector are forwarded. The overlap with more general development goals is emphasized.

#### Coe, David T.

PD March 1995. TI North-South Research and Development Spillovers. AU Coe, David T.; Helpman, Elhanan; Hoffmaister, Alexander W. AA Coe and Hoffmaister: International Monetary Fund. Helpman: Tel Aviv University and National Bureau of Economic Research. SR National Bureau of Economic Research, Working Paper: 5048; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 24. PR \$5.00. JE O33, O14. KW Spillover Effects. Research and Development. Developing Markets.

AB We examine the extent to which developing countries that do little, if any research and development themselves benefit from research and development that is performed in the industrial countries. By trading with an industrial country that has large "stocks of knowledge" from its cumulative research and development activities, a developing country can boost its productivity by importing a larger variety of intermediate products and capital equipment embodying foreign knowledge, and by acquiring useful information that would otherwise be costly to obtain. Our empirical results, which are based on observations over the 1971-90 period for 77 developing countries, suggest that research and development spillovers from the industrial countries in the North to the developing countries in the South are substantial.

#### Coestier, Benedicte

PD May 1995. TI Asymetrie d'Information, Reputation et Signes de Qualites. AA Universite de Paris X and CEPREMAP. SR CEPREMAP Discussion Paper: 9505; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. PG 34. PR 25 F.F. JE D82, L15. KW Asymmetric Information. Vertical Differentiation. Reputation. Price Guaranteeing Quality. Quality Test.

AB We consider a market with asymmetric information on product quality. First we present a model of repeat purchases with vertical differentiated consumers in the same spirit as Allen (1984). Then we introduce a costly test available to firms in order to help signaling themselves. We show that under some conditions, in reputation equilibrium with test, the price is greater than marginal cost in order to satisfy incentive conditions but is lower than the price that would have prevailed without test. The test thus partially overcomes moral hazard problems. A normative approach is conducted which leads us to characterize the optimal way of subsidizing quality signs.

#### Cohen, Daniel

PD June 1994. TI Uneven Technical Progress and Job Destructions. AU Cohen, Daniel; Saint-Paul, Gilles. AA Cohen: CEPREMAP. Saint-Paul: DELTA. SR Centre for Economic Policy Research, Discussion Paper: 979; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 24. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE E24, J31. KW Unemployment. Technical Progress. Diminished Expectations.

AB We develop a two-sector model in which technological progress alternatively raises the productivity of one sector after

another. We assume that goods are complements for the final consumers. The sector which benefits from technical progress will see a resulting fall in its price. In this model, any uneven technical progress leads to job destruction in the sector which benefits from it, and job creation in the least productive sector. We examine the pattern of wages and unemployment that follows shocks (symmetric or asymmetric) which can occur in the economy. We show that wages will immediately rise and overshoot their long-run target: as time passes they must fall, as will the degree of tightness in the labor market (and sometimes unemployment). An "age of diminished expectations" following any productivity shock is then likely to occur sooner or later.

PD February 1995. TI Test of the "Convergence Hypothesis": Some Further Results. AA Ecole Normale Supérieure, CEPREMAP, and CEPR. SR CEPREMAP Discussion Paper: 9509; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. PG 23. PR 25 F.F. JE O41, J24. KW Growth, Convergence. Human Capital. Physical Capital.

AB The paper offers new tests of the "convergence hypothesis". It first analyzes the pattern of growth of measured inputs (human and physical capital conventionally measured by an inventory method) and shows that these tests sustain the hypothesis. On the other hand, when one analyzes the pattern of growth of revealed inputs (physical capital and Solow residual), then one is led to reject the convergence theory. In order to understand what lies at the heart of this discrepancy, I will show that the poor countries failed to catch up to the rich countries not so much because they failed to raise their school enrollments (or the unconditional convergence of the stock of measured inputs would not hold), but because the law of motion of human capital embodies a "stock of knowledge" which they failed to raise adequately.

PD June 1995. TI The Transition in Russia Successes (Privatization, Low Employment) and Failures (Mafias, Liquidity Constraints) a Theoretical Analysis. AA Ecole Normale Supérieure, CEPREMAP, and CEPR. SR CEPREMAP Discussion Paper: 9507; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. PG 24. PR 25 F.F. JE P11, P21. KW Russia. Transition. Job-to-Job Mobility. Mafias.

AB The transition in Russia is analyzed through a theoretical model in which job-to-job mobility plays a key feature. It shows that mobility is a feature that keeps unemployment from experiencing discontinuous breaks and it insulates wages in declining sectors from aggregate disequilibria. When mafias can impose a tax to entry, inefficient sectors can be kept indefinitely alive, in which case the pattern of wages never gets to the state of perfect equalization that is brought under *laissez-faire*.

### Coles, Melvyn G.

TI Cross-Section Estimation of the Matching Function: Evidence from England and Wales. AU Smith, Eric; Coles, Melvyn G.

PD May 1994. TI Temporal Aggregation Bias in Stock-Flow Models. AU Coles, Melvyn G.; Burdett, Kenneth; Ours, Jan van. AA Coles and Burdett: University of Essex. Ours: Vrije Universiteit. SR Centre for Economic Policy Research, Discussion Paper: 967; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 10. PR 1 pound (\$2) individuals; 1.50

pounds (\$3) companies, libraries, institutions. JE C13, J64. KW Matching. Temporal Aggregation Bias.

AB The matching function describes the flow of job creation as a function of the stocks of unemployed and vacancies. Most empirical work tries to identify such a relationship by regressing the flow of matches (aggregated over the month) on the stocks of unemployment and vacancies measured at the beginning of that month. It is shown that estimates obtained using this procedure will be downward biased if unemployment and vacancies are mean-reverting processes. If the bias is small, the size of the bias is proportional to the length of the period interval. By further aggregating the data from monthly to quarterly data, the downward bias should triple. The resulting change in the parameter estimates can then be used to estimate the size of the original bias.

PD October 1994. TI Marketplaces and Matching. AU Coles, Melvyn G.; Smith, Eric. AA University of Essex. SR Centre for Economic Policy Research, Discussion Paper: 1048; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 14. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE J64, J41. KW Matching. Marketplaces. Unemployment Hazards.

AB This paper models equilibrium trading patterns when marketplaces exist and goods are differentiated. When first visiting the market, a buyer samples a stock of goods. If fortunate, the buyer matches with and purchases one of these goods and then exits the market. If an initial match does not exist, the buyer can now only match with the flow of new goods for sale. The previous stock has been sampled and rejected. In a steady state, the current stock of unmatched traders on one side of the market is trying to match with the flow of new traders on the other side. It is shown that this market behavior describes matching patterns between unemployed job seekers and vacancies in UK Job Centres.

PD October 1995. TI Strategic Bargaining With Firm Inventories. AU Coles, Melvyn G.; Smith, Eric. AA Coles: University of Essex. Smith: University of British Columbia and University of Essex. SR University of British Columbia, Department of Economics Discussion Paper: 95/38; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 34. PR 20 cents per page Canadian to other than educational institutions. JE C78, C73, E22, J52. KW Noncooperative Bargaining. Inventories. Stochastic Games. Dynamic Games.

AB This paper characterizes how a firm's opportunity to sell from its stock of inventories alters the outcome of strategic wage negotiations with a union of workers. Given the level of inventories, the negotiated wage increases when demand is high. More interestingly, given the state of demand, greater inventories increase the firm's threat of delay and thereby lower the union's wage. We further demonstrate that the bargaining outcome corresponds to a modified Nash bargain which provides a potentially useful method for incorporating these results into more general applications.

### Collier, Paul

PD July 1994. TI Trade Policy and Regional Integration: Implications for the Relations between Europe and Africa. AU Collier, Paul; Gunning, Jan Willem. AA Collier: Oxford University. Gunning: Vrije Universiteit Amsterdam.

**SR** Centre for Economic Policy Research, Discussion Paper: 1012; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 27. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F13, F15, F36, O19, O55. **KW** Regional Integration. Trade Liberalization. Reciprocal Discrimination. Credibility.

**AB** For Africa, a regional customs union is unlikely to realize net welfare gains (in the sense of trade creation dominating trade diversion) which cannot be attained through unilateral trade liberalization. Unilateral reform has often failed in Africa, however. A regional customs union tied to Europe with reciprocal free trade is likely to dominate unilateral liberalization in several ways. Most importantly, it would make trade liberalization credible and thereby easier to sustain.

### **Copeland, Brian R.**

**PD** January 1995. **TI** Trade and the Environment: A Partial Synthesis. **AU** Copeland, Brian R.; Taylor, M. Scott. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 95/03; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 17. **PR** 20 cents per page Canadian to other than educational institutions. **JE** F11, Q28. **KW** International Trade. Pollution. Environment. North-South.

**AB** This paper uses the concepts of pollution supply and demand to review and extend the recent literature on the interaction between trade liberalization, environmental quality, and national income levels. Under a wide variety of assumptions about the institutional response to pollution, theoretical models with production-generated pollution predict that (all else equal), pollution intensive industries tend to migrate to countries with weaker pollution regulations. We extend the literature by developing a simple new model of consumption-generated pollution, and find that trade shifts pollution-intensive consumption to the low income, low regulation, country. Consequently, the dirty industry migration hypothesis (broadly defined) appears to be robust to generalizations that include consumption-generated pollution.

**PD** July 1995. **TI** Trade, Non-Convexities and the Environment. **AU** Copeland, Brian R.; Taylor, M. Scott. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 95/19; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 35. **PR** 20 cents per page Canadian to other than educational institutions. **JE** F23, F11, D62. **KW** Trade. Environment. Pollution.

**AB** We develop a simple two-sector dynamic model to examine the effects of international trade in the presence of pollution-created intersectoral production externalities. We assume that the production of "Smokestack" manufactures generates pollution, which lowers the productivity of an environmentally sensitive sector ("Farming"). As a result, the long run production set is non-convex. Trade can play an important role in spatially separating incompatible industries. If pollution does not affect utility directly, then free trade is always welfare-improving for an unregulated small open economy. Two identical, unregulated countries will gain from trade if the share of world income spent on Smokestack is high. In contrast, when the share of world income spent on the dirty

good is low, trade can usher in a negatively reinforcing process of environmental degradation and real income loss for the exporter of Smokestack.

### **Corado, Cristina**

**PD** August 1994. **TI** Textiles and Clothing Trade with Central and Eastern Europe: Impact on Members of the EC. **AA** Universidade Nova de Lisboa. **SR** Centre for Economic Policy Research, Discussion Paper: 1004; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 34. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F13, F14, F15. **KW** Textiles and Clothing. Trade Policy. Trade Integration.

**AB** This paper discusses the Europe Agreements, implicit trade preferences given to the Central and East European countries (CEECs) and their impact on European Community (EC) members. As expected, South European countries compete in the same range of products and in a more similar quality market with the CEECs than do other EC countries. A significant part of this trade is explained by outward-processing trade (OPT) of clothing, however. EC firms increasingly move the labor-intensive stages of production to the CEECs. OPT competes in a different quality market than "direct" trade. Up to 1993, trade policy favored outward processing and was against "direct" trade and foreign direct investment. We draw some lessons from a similar experience in Portugal regarding OPT movements, foreign direct investment and effects of trade policy changes. During the CEECs' transition period, the policy bias will be eliminated. EC firms may go on processing products in the CEECs or may move elsewhere. The competitive pressures on South European countries will not change with further trade liberalization towards the CEECs because those pressures are unlikely to depend on OPT location. New OPT legislation designed to keep employment in the EC may have distributive effects among EC countries, however. The CEECs are the most likely to suffer from the proposed legislation if it is strictly applied.

### **Corbett, C.J**

**PD** May 1995. **TI** Strands of Practice in OR (The Practitioner's Dilemma). **AU** Corbett, C.J.; Overmeer, W.J.A.M.; Van Wassenhove, Luk N. **AA** Corbett and Van Wassenhove: INSEAD. Overmeer: INSEAD and New York University. **SR** INSEAD, Working Papers: 95/44/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 27. **PR** not available. **JE** C81, C88, D83. **KW** Operational Research. Strand of Practice. Learning Process.

**AB** This paper is a first step towards a different way of looking at the practice of OR, with implications for practitioners and researchers alike. We make two key observations: (1) Looking at how OR practitioners perform individual projects will not lead to a full understanding of how OR practitioners perform individual projects. Instead, one has to take into account the series of preceding projects by that same practitioner, to infer and understand his "strand of practice". (2) A practitioner's strand of practice is developed as the result of a learning process. Therefore, practitioners operating in different environments can have widely different strands of practice. Consequently, operationalizable guidelines about how to perform OR projects will have to include an indication of the strand(s) of practice for which they are valid.



Our observations are based on an exploratory series of interviews with practitioners and their clients.

**PD** August 1995. **TI** What the Cases Don't Tell Us. **AU** Corbett, C.J.; Overmeer, W.J.A.M.; Van Wassenhove, Luk N. **AA** Corbett and Van Wassenhove: INSEAD. Overmeer: INSEAD and New York University. **SR** INSEAD, Working Papers: 95/76/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 32. **PR** not available. **JE** C61, C63. **KW** Operations Research. Knowledge Transfer.

**AB** There is more to the practice of OR than meets the eye. Performing a successful project involves much more than simply applying techniques, and projects are rarely the linear progression that case descriptions frequently suggest they are. We will argue in this paper that successful practitioners do a lot more than they write about, and much of what they do not write about is in fact critical for their practice. As a result, the ropes of practice remain hidden behind a streamlined simplicity suggested by many cases, rendering the learning process for others, particularly the uninitiated such as students, novices, and clients, unnecessarily difficult.

### Coricelli, Fabrizio

**TI** Fiscal Constraints and the Speed of Transition. **AU** Chadha, Bankim; Coricelli, Fabrizio.

### Cornelius, Peter K.

**TI** Trade Policies and Lithuania's Reintegration into the Global Economy. **AU** Cicinskis, Jonas; Cornelius, Peter K.; Treigiene, Dalia.

### Corneo, Giacomo G.

**PD** March 1995. **TI** The Theory of the Open Shop Trade Union Reconsidered. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/477; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 22. **PR** no charge. **JE** D82, J51. **KW** Trade Union Membership. Social Custom Models. Status Seeking.

**AB** In this paper a microeconomic foundation of the social custom approach to trade union membership is provided. The reputation effect of belonging to the union is endogenized as the outcome of a signaling game among the workers. The signaling value of being a union member depends in equilibrium on the union density, but the form of this relationship may turn out to differ from what is usually assumed in the literature. Conditions for the existence of a critical mass that is necessary for union viability are determined and given a precise interpretation in terms of status-seeking behavior. Finally, implications for optimal unionism are derived.

**PD** September 1995. **TI** Adam Smith's Second Invisible Hand. **AU** Corneo, Giacomo G.; Jeanne, Olivier. **AA** Corneo: University of Bonn. Jeanne: Ecole Nationale des Ponts et Chaussees. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/492; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 13. **PR** no charge. **JE** E13, O41. **KW** Endogenous Growth. Optimality of Growth. Status-Seeking Behavior.

**AB** Social incentive mechanisms based on status or social esteem have long been thought to play a crucial role in shaping

economic growth. We analyze the influence of the desire of status on economic growth in a model with technological spillovers a la Arrow (1962) and Romer (1986). When status depends on relative wealth, the growth rate of the competitive economy can be socially optimal if the status motive is sufficiently important. The presence of status seeking may even lead to excessive growth under *laissez-faire*.

**PD** November 1995. **TI** Status-Seeking Can Generate Long-Run Growth in the Solow-Cass Model. **AU** Corneo, Giacomo G.; Jeanne, Olivier. **AA** Corneo: University of Bonn. Jeanne: Ecole Nationale des Ponts et Chaussees. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/497; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 13. **PR** no charge. **JE** O40, O41. **KW** Long-Run Growth. Capital Accumulation. Status-Seeking Behavior.

**AB** A desire for social status may lead individuals to care about their relative wealth. We prove that the presence of a desire for status, even if very limited, can generate endogenous growth in the Solow-Cass model. Hence, status-seeking may be seen as an engine of economic growth. When the status-seeking motive is small, long-run growth only appears if the initial stock of capital is large enough, i.e. the long-term behavior of the economy depends on its initial conditions.

### Correia, Isabel

**PD** July 1994. **TI** Business Cycles in a Small Open Economy. **AU** Correia, Isabel; Neves, Joao C.; Rebelo, Sergio. **AA** Correia and Neves: Portuguese Catholic University. Rebelo: University of Rochester. **SR** Centre for Economic Policy Research, Discussion Paper: 996; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 23. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** E32, F32, F41. **KW** Business Cycles. Open Economy. Trade Balance.

**AB** This paper discusses a dynamic model that is consistent with the main empirical regularities of economic fluctuations in open economies. While other models in this class have relied on non-separable preferences or finite horizons to generate a realistic consumption volatility, we show that there is a simple class of time separable preferences that is consistent with the cyclical volatilities of the components of the national income accounts identity as well as with the countercyclical character of the balance of trade.

### Corstjens, Judy

**PD** March 1995. **TI** Retail Competition in the Fast-Moving Consumer Goods Industry: The Case of France and the UK. **AU** Corstjens, Judy; Corstjens, Marcel; Lal, Rajiv. **AA** Corstjens, J.: ARROW. Corstjens, M.: INSEAD. Lal: Stanford University. **SR** INSEAD, Working Papers: 95/50/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 25. **PR** not available. **JE** L81, M30. **KW** Consumer Goods. Profit Margin. Private Labels. Comparative Study. Competitive Strategy.

**AB** In the last ten years, the competitive behavior among fast-moving consumer goods (FMCG) retailers in France has been surprisingly different to that observed in the UK, given the proximity of the countries and their many shared conditions (similar products, income level, same manufacturer suppliers, common market, etc.). In France, the rivalry between the major retail chains has been largely price driven, while on the other

side of the channel, the largest and most successful retail chains have competed on quality -- in particular store differentiation via own labels and fresh products, range, and size of store. The profitability and market value of retailers resulting from these contrasting strategies has been correspondingly different. We illustrate the differences by focusing on six of the largest (grocery) retail chains: for the UK, Sainsbury, Tesco and Argyl; and for France, Carrefour, Promodes and Casino. These chains account for over 50% and 40% respectively of the national total sales. Two of the four largest grocers in France (Leclerc and Intermarche) are not included because, due to their private ownership, figures are not available. We believe their situation to be substantially similar to those examined.

### Corstjens, Marcel

TI Retail Competition in the Fast-Moving Consumer Goods Industry: The Case of France and the UK. AU Corstjens, Judy; Corstjens, Marcel; Lal, Rajiv.

### Cragg, John G.

PD June 1995. TI Using Higher Moments to Estimate the Simple Errors-in-Variables Model. AA University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 95/18; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 34. PR 20 cents per page Canadian to other than educational institutions. JE C13, C51. KW Measurement Error. Minimum-Estimation. Bivariate Regression. Instrumental Variables. Bootstrap.

AB Using sample moments up to the fourth in the standard simple regression model with measurement errors allows testing whether the parameters are identified by having independent variables which are not normally distributed. If the parameters are identified, these moments can be used to estimate them consistently and asymptotically efficiently by minimum chi-square. If instruments are available, they may be used to get more efficient, consistent estimates than are provided by either instrumental-variable estimation or by the higher moment approach alone. A Monte Carlo study indicates that the approach offers a feasible, practical approach to handling errors in variables. Inference may sometimes be improved by using bootstrapped estimates, but the improvement is not marked or very dependable. If there is an instrumental variable which is not a very strong one, it may be advantageous even in fairly small samples to combine the fourth-moment approach with instrumental-variables to produce a combined estimator (which is asymptotically more efficient) rather than to rely on the instrumental variables alone.

### Cragg, Michael I.

TI Dynamics of Canadian Welfare Participation. AU Barrett, Garry F.; Cragg, Michael I.

### Cram, Donald P.

PD March 1996. TI CRSP Data Retrieval and Analysis in SAS Software for Users and Administrators. AA Stanford University. SR Stanford University, Graduate School of Business Technical Report: 80; Jackson Library, Graduate School of Business, Stanford University, Stanford, CA 94305-5016. PG 31. PR not available. JE C87, C88. KW SAS. Security Prices. CRSP. Software. AB Center for Research in Security Prices (CRSP) data users

would prefer to leave behind, or never learn, the Fortran programs that are most commonly used to retrieve and analyze CRSP data. But while a 1994 SAS Users Group International conference paper explained theoretical benefits of using SAS to deliver CRSP and other large databases at a major U.S. business school, and while SAS/ETS's PROC DATASOURCE has been available since 1993, it appears that few CRSP sites are set up well for the SAS user. Sample SAS/ETS and Base SAS programs, general programming tips, and certain supporting central files at each site are needed. This paper, and an associated WWW-site with downloadable programs, addresses these gaps in service to existing and would-be CRSP SAS users. It is targeted for beginning CRSP users with moderate SAS experience and for system administrators who may install central files to help users. Some tips are framed specifically to pertain to the Unix operating system and other particulars of the Stanford Graduate School of Business CRSP site, but the sample programs should run on all platforms. The sample programs include an event study, one of the most frequent CRSP data applications, which employs SAS macro-language programming and uses central files installed by system administrator programs which also are provided.

### Crauwels, H.A.J

PD 1995. TI Local Search Heuristics for Single Machine Scheduling With Batching to Minimize the Number of Late Jobs. AU Crauwels, H.A.J.; Potts, C.N.; Van Wassenhove, Luk N. AA Crauwels: KIHND. Potts: University of Southampton. Van Wassenhove: INSEAD. SR INSEAD, Working Papers: 95/73/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 15. PR not available. JE D24, L23. KW Scheduling. Search Heuristics. Descent. Simulated Annealing. Tabu Search. Genetic Algorithm.

AB Local search heuristics are developed for a problem of scheduling jobs on a single machine. Jobs are partitioned into families, and a set-up time is necessary when there is a switch in processing jobs from one family to jobs of another family. The objective is to minimize the number of late jobs. Four alternative local search methods are proposed: multi-start descent, simulated annealing, tabu search and a genetic algorithm. The performance of these heuristics is evaluated on a large set of test problems. The best results are obtained with the genetic algorithm; multi-start descent also performs quite well.

PD January 1995. TI Local Search Heuristics for Single Machine Scheduling With Batching to Minimize Total Weighted Completion Time. AU Crauwels, H.A.J.; Potts, C.N.; Van Wassenhove, Luk N. AA Crauwels: KIHND, Sint-Katelijne-Waver, Belgium. Potts: University of Southampton. Van Wassenhove: INSEAD. SR INSEAD, Working Papers: 95/28/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 14. PR not available. JE D24, L23. KW Scheduling. Search Heuristics. Descent. Simulated Annealing. Threshold Accepting.

AB Local search heuristics are developed for a problem of scheduling jobs on a single machine. Jobs are partitioned into families, and a set-up time is necessary when there is a switch in processing jobs from one family to jobs of another family. The objective is to minimize the total weighted completion time. Four alternative neighborhood search methods are developed: multi-start descent, simulated annealing, threshold

accepting and tabu search. The performance of these heuristics is evaluated on a large set of test problems, and the results are also compared with those obtained by a genetic algorithm. The tabu search method generates high quality schedules relative to the other methods at modest computational expense.

**PD** July 1995. **TI** Branch and Bound Algorithms for Single Machine Scheduling With Batch Set-Up Times to Minimize Total Weighted Completion Time. **AU** Crauwels, H.A.J.; Hariri, A.M.A.; Potts, C.N.; Van Wassenhove, Luk N. **AA** Crauwels: KIHND, Hariri: King Abdul-Aziz University, Potts: University of Southampton, Van Wassenhove: INSEAD. **SR** INSEAD, Working Papers: 95/70/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 16. **PR** not available. **JE** C61, D24, L23. **KW** Scheduling, Single Machine, Branch Algorithm, Bound Algorithm, Batching.

**AB** This paper presents several branch and bound algorithms for a single machine scheduling problem with batching. Jobs are partitioned into families, and a set-up time is necessary when there is a switch from processing jobs of one family to jobs of another family. The objective is to minimize the total weighted completion time. A lower bound based on Lagrangean relaxation of the machine capacity constraint is derived. Also, a multiplier adjustment method to find values of the multipliers is proposed. Computational experience with instances having up to 70 jobs shows that the lower bounds are effective in restricting the search.

#### Cressman, R.

**PD** July 1995. **TI** Dynamic Stability in Perturbed Games. **AU** Cressman, R.; Schlag, Karl H. **AA** Cressman: Wilfrid Laurier University, Schlag: University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/321; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 35. **PR** no charge. **JE** C72, C79. **KW** Evolutionarily Stability, Replicator Dynamics, Asymptotic Stability.

**AB** The effect that exogenous mistakes, made by players choosing their strategies, have on the dynamic stability for the replicator dynamic is analyzed for both asymmetric and symmetric normal form games. Through these perturbed games, the dynamic solution concept of limit asymptotic stability is motivated by insisting that such solutions be asymptotically stable for all sufficiently small perturbations (a robustness property). Limit asymptotic stability is then a refinement of the Nash equilibrium. For asymmetric normal form games, it is shown that a strategy pair is limit asymptotically stable if and only if it is a pure strategy pair that weakly dominates alternative best replies. For symmetric normal form games, all evolutionary stable strategies (ESS's), whether pure or mixed, are limit asymptotically stable. Here, conditions are established for limit asymptotic stability of completely mixed (i.e. interior) strategies as well as strategies on the boundary. Consistency with solutions found by backwards and/or forwards induction is shown for elementary extensive form games. Limit asymptotically stable sets are introduced that generalize other set-valued solution concepts such as the "strict equilibrium set" and the "ES set" for asymmetric and symmetric normal form games respectively.

**PD** January 1996. **TI** The Dynamic (In)stability of Backwards Induction. **AU** Cressman, R.; Schlag, Karl H.

**AA** Cressman: Wilfrid Laurier University, Schlag: University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/347; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 34. **PR** no charge. **JE** C72, C73. **KW** Perfect Information, Extensive-Form Game, Centipede Game, Backwards Induction, Replicator Dynamic.

**AB** The analysis of the replicator dynamic in generic perfect information games yields the following results. In the long run, players play a Nash equilibrium provided that initially all strategies are present. There is at most one "stable" component (formally, an interior asymptotically stable set), and play in this component will follow the backwards induction path. Existence of such a component is guaranteed in a simple class of games with at most three consecutive decision nodes. An example of a "longer" game is provided where some trajectories starting close to the backwards induction component lead away and never come back.

#### Cron, Axel

**PD** June 1995. **TI** Uniform Consistency of Modified Kernel Estimators in Parametric ARCH-Models. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/316; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 24. **PR** no charge. **JE** C14, C22. **KW** ARCH (q)-Model, Kernel Estimation, Nonparametric Regression.

**AB** This paper shows the uniform convergence in probability of a modified kernel estimator towards the Baire function representing the conditional variance provided the data generating process is given by a strictly stationary solution of a parametric ARCH (q)-model.

**PD** July 1995. **TI** Uniform Consistency of Modified Kernel Estimators in Nonparametric Multivariate VARCH-Models. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/318; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 25. **PR** no charge. **JE** C14, C22. **KW** VARCH-Model, Kernel Estimation, Nonparametric Regression.

**AB** This paper shows the uniform convergence in probability of modified kernel estimators towards the Baire functions representing the conditional variances and contemporaneous conditional covariances provided the data generating process is given by a strictly stationary solution of a nonparametric multivariate VARCH (q,m)-model.

**PD** October 1995. **TI** Kernel Estimation in Regime-Varying Regression Models. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/332; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 13. **PR** no charge. **JE** C14, C32. **KW** Regime-Varying Regression, Kernel Estimation, Nonparametric Regression.

**AB** We analyze the asymptotic behavior of kernel estimators provided the underlying regression functions (called regimes here) are time-dependent. We show the uniform convergence in probability of the kernel estimators towards a Baire function that can be interpreted as a weighted average of the different regimes. Moreover, we propose consistent estimators for the different regimes for the case that the terms of the regimes are

known.

**PD** January 1996. **TI** German Unification and the EMS: A Non-Parametric Approach to the Assymetry Question. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/353; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 21. **PR** no charge. **JE** F33, E43, C14. **KW** European Monetary System (EMS). German Unification. Assymetry. Interest Rates. Speculative Crises.

**AB** This paper attempts to analyze the impact of German unification on the position that Germany holds within the European Monetary System (EMS), i.e. on the asymmetry in the EMS. Applying kernel estimation and bootstrap methods we can corroborate that result of previous studies that Germany's position within the EMS was not weakened by German unification when speculative periods before and after German unification are compared. Moreover, our data exhibit significant non-linearities pointing to threshold cointegration or regime switching processes.

### Csaba, Laszlo

**PD** October 1994. **TI** The Political Economy of Trade Regimes in Central Europe. **AA** KOPINT-DATORG Institute. **SR** Centre for Economic Policy Research, Discussion Paper: 1017; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 49. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F13, F14, F15. **KW** Protectionism. Liberalization. Transformation. Lobbying. EU.

**AB** This paper evaluates the robustness of trade liberalization in Central Europe and the role of the Europe Agreements (EAs) in institutionalizing this process. It finds a) that institutions are still fragile in Central Europe; b) that the EAs are not a great force for liberalism (on either side); and c) that there is a danger that trade policy will become submerged by other, apparently more important, issues. In this context abolition of governmental agencies with a stake in free trade is seen as a step in the wrong direction.

### Currie, Janet

**PD** March 1995. **TI** Health Insurance Eligibility, Utilization of Medical Care, and Child Health. **AU** Currie, Janet; Gruber, Jonathan. **AA** Currie: University of California, Los Angeles and National Bureau of Economic Research. Gruber: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5052; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 31. **PR** \$5.00. **JE** I11, I12, I18. **KW** Child Mortality. Health Insurance. Health Care. Welfare Reform.

**AB** The poor health status of children in the U.S. relative to other industrialized nations has motivated recent efforts to extend insurance coverage to underprivileged children. There is little past evidence, however, that extending eligibility for public insurance to previously ineligible groups will increase health status or even utilization of medical resources. Using data from the Current Population Survey, the National Health Interview Survey, and state-level data on child mortality, we examine the utilization and health effects of eligibility for public insurance. Our models are identified by the recent

expansions of the Medicaid program to low income children. We find that these expansions roughly doubled the fraction of children eligible for Medicaid between 1984 and 1992; by 1992, almost 1/3 of all children were eligible. Takeup of these expansions was much less than full, however, even among otherwise uninsured children. Despite this takeup problem, we find that eligibility for Medicaid significantly increased the utilization of medical care along a number of dimensions. Medicaid eligibility was associated with large increases in care delivered in physician's offices, although there was some increase in care in hospital settings as well. While there was no effect of eligibility on parentally-assessed subjective health measures, we do find significant reductions in child mortality. Finally, we find that rising Medicaid eligibility is associated with reductions in racial disparities in the number of visits and in child mortality. However, there is some evidence of increased disparities in the site at which care is delivered.

### Cyr, D.J

**PD** 1995. **TI** Organizational Learning In East-West Joint Ventures: The Role of HRM. **AU** Cyr, D.J.; Schneider, S. **AA** Cyr: University of British Columbia. Schneider: INSEAD. **SR** INSEAD, Working Papers: 95/30/OB; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 21. **PR** not available. **JE** F23, M12, M14. **KW** Human Resource Management. Learning. Joint Ventures.

**AB** The purpose of this research was to explore how human resource management policies and practices contribute to organizational learning in joint ventures between Western European companies and Central/Eastern European companies. Our discussion is based on extensive interviews and field observation, as well as survey data, at multiple levels of the organization in three joint ventures between Western European and Central/Eastern European companies (French-Polish, German-Czech, and Swedish-Hungarian). These cases provide the opportunity to consider the conditions felt necessary for learning to take place in joint ventures, particularly across the East/West divide. Human resource management (HRM) was found to play an important role in organizational learning in the following ways: 1) in promoting the sharing of responsibility between local and foreign managers; 2) in contributing to the development of new attitudes and behaviors through training and reward systems; and 3) in helping to create a new corporate culture and value system.

### Dalhaeuser, Heike

**PD** July 1995. **TI** Prominenz der Preise in Einem Warenhauskatalog. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/317; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 83. **PR** no charge. **JE** D21, L81, M31. **KW** Prominence in the Decimal System. Mail-Order Catalog Prices.

**AB** This paper is concerned with the influence of psychological aspects of the perception of numbers on pricing behavior. The wide spread usage of prices just below prominent numbers is attributed to the belief of the price-setting subjects that many potential customers base their buying decisions on prominent numbers as upper price limits. The aim of the empirical investigation presented in this paper is to find the prominent price limits below which the catalog prices of a

that many potential customers base their buying decisions on prominent numbers as upper price limits. The aim of the empirical investigation presented in this paper is to find the prominent price limits below which the catalog prices of a certain department store are kept. In addition the structure of the deductions from the prominent prices is examined. The prominence level of the prices is determined using a method developed by Selten. The proposed rule for rounding prices to prominent levels is tested and a simplified version is introduced.

### Danthine, Jean Pierre

PD April 1995. TI Asset Pricing Implications of Real Market Frictions. AU Danthine, Jean Pierre; Donaldson, John B. AA Danthine: University of Lausanne. Donaldson: Columbia University. SR Universite de Lausanne Cahiers de Recherches Economiques: 9504; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 52. PR no charge. JE E32, G12. KW Asset Pricing, Volatility, Equity Premium, Labor Contracts.

AB The objectives of this paper are threefold: (1) to present a family of full-fledged dynamic macroeconomic models with financial sectors, (2) to discuss their implications for the pricing of financial assets, and (3) to evaluate quantitatively the potential of each model to explain a set of key stylized facts from the financial markets. We begin with an asset pricing model in the spirit of Lucas (1978) which we merge with a standard dynamic equilibrium model of capital accumulation. We next provide a new decentralized interpretation of the model's equilibrium. Under this interpretation firms make meaningful multiperiod investment decisions. We then compare, both quantitatively and qualitatively, the implications of the model with empirical summaries of actual financial market behavior. On the basis of that comparison, we then progressively enrich the model by introducing costs to adjusting the stock of capital, corporate debt, and labor contracts. We conclude that additional progress towards the resolution of this outstanding financial puzzle is as likely to come from a richer modeling of the real side of economies as from further refinements in the descriptions of the financial sector.

### Dattels, Peter

PD November 1995. TI The Microstructure of Government Securities Markets. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/117; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 41. PR not available. JE D44, G14, G28. KW Auctions, Microstructure, Government Securities.

AB This paper applies the "market microstructure" literature to the specific features of government securities markets and draws implications for the strategy to develop government securities markets. It argues for an active role of the authorities in fostering the development of efficient market structures.

### David, Paul A.

PD March 1996. TI Real Income and Economic Welfare Growth in the Early Republic or, Another Try at Getting the American Story Straight. AA All Souls College at Oxford and Stanford University. SR University of Oxford, Discussion Papers in Economic and Social History: 5; Avner

Offer, Nuffield College, Oxford, OX1 1NF. PG 39. PR not available. JE N31, Q10. KW Agriculture Sector, Industrialization, Land Abundance, Income.

AB This paper removes the inconsistencies in two opposing views regarding the relative productivity of the agriculture sector during the antebellum era. Some studies claim that land abundance in North America resulted in levels of average and marginal productivity in farming that remained so high that scarce and relatively dear labor constituted an obstacle to the growth of other, especially manufacturing, employments - an obstacle that was eventually alleviated after 1815 by the combined effects of the imposition of protective tariffs, the substitution of machinery, and the encouragement of the labor sector. Other studies view agriculture as the comparatively backward, relatively low labor productivity sector, and they show the secular reallocation of the labor force over the 1800-1840 era as having not simply resulted in a shrinkage in the relative size of the farm sector consistent with a rising trend in real income per capita, but as having contributed substantially to the latter trend by shifting workers from low to higher productivity employments.

### Dawar, N.

TI The Joint Effects of Brands and Warranties in Signaling New Product Quality. AU Price, L.J.; Dawar, N.

PD November 1995. TI A Cross-Cultural Study of Interpersonal Information Exchange. AU Dawar, N.; Parker, Philip M.; Price, L.J. AA Dawar and Parker: INSEAD, Price: Hong Kong University. SR INSEAD, Working Papers: 95/89/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 30. PR not available. JE L14, L15. KW Information Exchange, Product Adoption, International Cultures.

AB Research conducted primarily in the United States has shown that interpersonal influence arising from opinion exchange behavior is an important factor in consumers' product adoption and brand choice decision. An important managerial question in the international arena is whether information giving and seeking behaviors depend on culture. In a study representing eleven nationalities, we explore the role of culture in moderating consumers' opinion exchange behavior. Results indicate that the cultural characteristics of power distance and uncertainty avoidance influence the focus of consumers' product information search activities, but not their tendencies to share product-related opinions with others. Following earlier opinion leadership studies, we find that individual characteristics such as product category interest and involvement are most indicative of active opinion leadership behavior.

### De Broeck, Mark

PD December 1995. TI Inflation Dynamics in Kazakhstan. AU De Broeck, Mark; De Masi, Paula; Koen, Vincent. AA De Broeck and De Masi: International Monetary Fund. Koen: OECD. SR International Monetary Fund, Working Paper: 95/140; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG18. PG not available. PR not available. JE E31, P22, R32. KW Kazakhstan, Economic Reform, Inflation.

AB In January 1992, Kazakhstan initiated a reform program to move toward market-determined prices. The price liberalization process was characterized by large relative price shifts and an increase in the overall price level toward those

observed in market economies. The paper shows how the piecemeal manner in which prices were liberalized resulted in strong relative price variability over a prolonged period of time, against a background of high inflation. Convergence toward international relative and absolute price levels has progressed but is not complete, with prices for energy and services in particular still below market economy levels.

#### De Grauwe, Paul

PD October 1994. TI Monetary Policies in the EMS: Lessons from the Great Recession of 1991-3. AA Katholieke Universiteit Leuven. SR Centre for Economic Policy Research, Discussion Paper: 1047; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 19. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F33, F36, F42. KW Monetary Policy. EMS. Recession.

AB This paper analyzes the nature of the monetary policies in the EMS during the most recent recession. It shows that these monetary policies were very restrictive in an historical perspective, and identifies the characteristics of the workings of the EMS responsible for these monetary policies.

#### De Gregorio, Jose

TI How Does Foreign Direct Investment Affect Economic Growth? AU Borensztein, Eduardo; De Gregorio, Jose; Lee, Jong-Wha.

#### De Koning, Alice J.

TI Entrepreneurial Transformation: A Descriptive Theory. AU Muzyka, Daniel F.; De Koning, Alice J.; Churchill, N.

PD 1996. TI The Convergence of Good Ideas: How do Serial Entrepreneurs Recognize Innovative Business Ideas? AU De Koning, Alice J.; Muzyka, Daniel F. AA INSEAD. SR INSEAD, Working Papers: 96/16/ENT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 19. PR not available. JE M13, O31. KW Entrepreneurship. Idea Convergence. Knowledge.

AB We report on the findings of the first phase of a research program investigating the idea convergence process which results in new venture opportunities. In this phase we interviewed 10 successful habitual or serial entrepreneurs. Some results replicated earlier studies, especially motivations and psychological traits, some added a new insight and depth to previous results, and some introduced new issues into our research agenda. The final section begins to develop a theoretical discussion on four issues: opportunity as a subjective reality, how partnerships and "know-how" contribute, the counter-intuitive or contrarian thinking style, and opportunism as a path dependent process.

#### De Masi, Paula

TI Inflation Dynamics in Kazakstan. AU De Broeck, Mark; De Masi, Paula; Koen, Vincent.

PD January 1996. TI Aspects of the Swiss Labor Market. AU De Masi, Paula; Henry, S.G.B. AA De Masi: International Monetary Fund. Henry: University of Cambridge. SR International Monetary Fund, Working Paper: 96/3; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 18. PR not available. JE J64, E24. KW Switzerland. Labor Supply.

AB This paper presents an analysis of the behavior of the

Swiss labor market, which emphasizes both changes to labor supply and real wage inflexibility as determinants of recent unusually high levels of unemployment. Supply responses in the past meant that measured unemployment rates were rarely high. The paper suggests that these responses also meant that real wages were probably less responsive to shocks as a result. Econometric tests reported in the paper broadly confirm these suggestions, and imply that the level of unemployment consistent with stable inflation has risen in Switzerland.

#### De Melo, Jaime

TI The Europe Agreements and EC-LDC Relations. AU Cadot, Olivier; De Melo, Jaime.

TI France and the CEECs: Adjusting to Another Enlargement. AU Cadot, Olivier; De Melo, Jaime.

#### De Meyer, Arnoud

PD 1996. TI Separating the Fads From the Facts: Trends in Manufacturing Action Programmes and Competitive Priorities From 1986 Till 1994. AU De Meyer, Arnoud; Pycke, Bart. AA INSEAD. SR INSEAD, Working Papers: 96/21/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 18. PR not available. JE L15, L23, L60, M11. KW Manufacturing Strategy. Manufacturing Action Programs. Competitive Priorities. Europe.

AB Manufacturing Strategy is about the choice of priorities and the process and programs through which these choices are implemented. Since 1986 we have carried out at INSEAD a bi-yearly survey of manufacturing strategy practices in Europe which focuses on these priorities and action programs. Using the data of 5 consecutive surveys we have analyzed the evolution of manufacturing action programs and competitive priorities over the last decade. It appears that the consistently most emphasized action programs are in the field of integrating information technology. Furthermore we observe that "hard" standalone technology has been abandoned in favor of "soft" action programs, e.g. strategic human resources management. This shift in action programs can be explained by a shift in competitive priorities. Quality has increasingly become a qualifier for European manufacturing companies, while the ability to offer dependable deliveries and low pricing has gained considerably in importance from 1986 till 1994.

PD 1996. TI Global Plant Networks in European Multinationals. AU De Meyer, Arnoud; Van Dierdonck, Roland; Vereecke, Ann. AA De Meyer: INSEAD. Van Dierdonck and Vereecke: University of Gent. SR INSEAD, Working Papers: 96/22/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 11. PR not available. JE F23. KW MNC. Market Proximity. Low-Cost Labor. Labor quality.

AB This paper discusses the network of manufacturing facilities in European multinationals on the basis of the "European Manufacturing Futures Survey". It is shown that proximity to the market and low-cost labor are the main drivers for establishing a plant abroad, and that access to high quality input factors is the main differentiator in the decision to manufacture abroad. The results indicate that manufacturing companies consider proximity to the market as a logistical advantage, much more than an opportunity for tailoring their products to their markets. Companies that emphasize product leadership attach much importance to the availability of

qualified labor in the design of their plant network. Finally, the importance of managing the plant configuration as a tight network of plants is highlighted.

#### De Meza, David

TI Too Few Risk Takers. AU Black, Jane; De Meza, David.

#### De O'Connell, Ricardo

PD December 1995. TI Capital-Gains Taxation in Applied General Equilibrium. AA University of Minnesota. SR University of Minnesota, Center for Economic Research, Discussion Paper: 285; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. PG 46. PR no charge. JE E62, H24, D58. KW Capital Gains Taxation. Applied General Equilibrium. Economic Growth. Consumption Amoothing.

AB Despite the widespread belief that taxation upon realization discourages trade, the study of its macroeconomic effects has been limited by the lack of general equilibrium models suitable for quantitative analysis of capital-gains taxation. In this paper I present a variant of the standard growth model, amended to accommodate a role for asset trading and to generate capital gains. With a reasonable parameterization and a judiciously selected realization tax policy, revenues attributable to taxes on capital-gains in the computed steady-state resemble their counterpart for the U.S. data. I also ask whether this government policy is a tax on consumption smoothing. I proceed by studying another steady state that attains when gains are taxed upon accrual. I find the answer to be in the affirmative. Moreover, when compared to a 28 percent realization tax rate, accrual taxation is capable of raising the same revenue with a tax rate of just 7.7 percent together with a welfare improvement.

#### De Vilder, Robin G.

PD January 1995. TI Complicated Endogenous Business Cycles under Gross Substitutability. AA University of Amsterdam. SR CEPREMAP Discussion Paper: 9501; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. PG 29. PR 25 F.F. JE E32, C68. KW Nonlinear Business Cycles. Homoclinic Bifurcations. The Autarkic Steady State.

AB In this paper we investigate the global behavior of the output equilibrium time paths in an overlapping generations (OLG)-model where agents optimize utility, have perfect foresight and where markets are competitive. It has been shown that in a one-dimensional version of this model, periodic and even chaotic equilibrium time paths may occur whenever there is a strong conflict between the substitution and the income-effect. However, chaos only arises when the income effect is very strong. We will show that in a two-dimensional OLG-model with productive investment and capital accumulation the equilibrium time paths can converge to periodic as well as to complicated attractors even when the substitution effect dominates the income effect everywhere. It turns out that the autarkic steady state (a saddle point) plays a crucial role in this process. In particular, homoclinic intersections of the stable and unstable sets of the autarkic equilibrium cause complicated dynamical behavior. This feature seems to be present in a broad class of nonlinear economic models. We present rigorous and computer assisted proofs of the results, using very recent

findings from nonlinear dynamical system theory.

TI Endogenous Business Cycles in a Two-Dimensional OLG Model. AU Hommes, Cars; De Vilder, Robin G.

#### De Ville, Philippe

TI Economic Growth in Post-War Belgium. AU Cassiers, Isabelle; De Ville, Philippe; Solar, Peter M.

#### Dearden, Lorraine

PD November 1995. TI Intergenerational Mobility in Britain. AU Dearden, Lorraine; Machin, Stephen; Reed, Howard. AA Dearden and Reed; Institute for Fiscal Studies. Machin; University College London and London School of Economics. SR University College London Discussion Paper: 95/20; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG 42. PR 3 Pounds; checks payable to Department of Economics, University College London. JE J62, D31. KW Mobility. Intergenerational. Education. Distribution.

AB In this paper we use longitudinal data on children and their parents to assess the extent of intergenerational mobility in Britain. Based on data from the National Child Development Survey, a cohort of all individuals born in a week of March 1958, we find that the extent of intergenerational mobility is limited. We report an intergenerational correlation of the order of .40 to .60 for fathers and sons and .45 to .70 for fathers and daughters in terms of labor market earnings and years of schooling. An examination of quartile transition matrices between parental and child earnings outcomes reveals a similar pattern. Finally, it seems, on the basis of these transition matrices, that there is an important asymmetry in intergenerational earnings mobility with upward mobility from the bottom of the earnings distribution being more likely than downward mobility from the top.

#### Debelle, Guy

PD March 1995. TI Monetary Policy Goals for Inflation in Australia. AU Debelle, Guy; Stevens, Glenn. AA Reserve Bank of Australia. SR Reserve Bank of Australia, Research Discussion Paper: 9503; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, SYDNEY NSW 2001. PG 29. PR not available. JE E31, E52. KW Monetary Policy. Inflation.

AB This paper outlines the inflation objective for monetary policy in Australia, which we describe as seeking to achieve a broad central tendency for inflation of between 2 and 3 percent over the long-run -- a "thick point" -- rather than a narrow target band. It also provides a more detailed rationale for this objective. In doing so, the paper discusses the issues relevant in determining the appropriate mean inflation rate at which policy should aim, the degree of variation of inflation around that central point, and how policy should respond to shocks. A simple model of the economy is presented which attempts to address these issues in a consistent framework.

PD January 1996. TI Central Bank Independence: a Free Lunch? AA International Monetary Fund. SR International Monetary Fund, Working Paper: 96/1; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 17. PR not available. JE E58, E31. KW Central Banks. Autonomy. Credible Commitment.

AB This paper extends the analysis of central bank independence to a model in which there is more than one

policymaker. It shows that the degree of central bank independence as generally defined in the existing theoretical literature is only one of the influences on macroeconomic performance. The objectives of the fiscal authority, the commitment mechanisms available to the authorities and the nature of the policy game play a key role in determining the inflation rate and output in the economy. Furthermore, the model can be solved for the optimal degree of inflation aversion of the central bank.

#### Degrise, Hans

PD February 1996. TI The Total Cost of Trading Belgian Shares: Brussels Versus London. AA Departement d'Econometrie et d'Economie Politique, Ecole des HEC and Universite de Lausanne. SR Universite de Lausanne Cahiers de Recherches Economiques: 9602; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 31. PR no charge. JE G14, G15. KW Transaction Costs. Brussels Stock Exchange. SEAQ International.

AB Since 1990, London's SEAQ International attracts considerable trading volume in Belgian equities. This paper uses transactions, quotation, and limit order book data to investigate competition between the Brussels CATS market and SEAQ International. It focuses in more detail on the liquidity (indirect costs) measured by the quoted and effective bid-ask spread. CATS outweighs SEAQI for both measures. The effective spread is substantially smaller than the quoted spread. The CATS effective spread shows a U-shape form. This is in line with the different market micro-structure models. Total trading costs on CATS are lower (higher) for small (large) trade sizes.

#### Del Boca, Alessandra

PD October 1995. TI How Much Does Hiring and Firing Cost? Survey Evidence From Italy. AU Del Boca, Alessandra; Rola, Paula. AA Del Boca: University of Brescia. Rola: University College London. SR University College London Discussion Paper: 95/15; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG 35. PR 3 Pounds; checks payable to Department of Economics, University College London. JE J63, K31, J68. KW Hiring. Firing. Adjustment Costs. Labor Law.

AB We analyze the Italian labor market, which is typically considered to be highly regulated. We focus on the costs imposed on firms by the institutional environment in which they operate, and on the adjustment strategies that they pursue as a result. Understanding the ways in which companies attempt to circumvent regulations is crucial in explaining the effects of hiring and firing costs. Specifically, our survey is addressed to the issues of whether adjustment costs are symmetric, and whether they have fixed components which are independent of the scale of adjustment. We have followed two complementary approaches: the analysis of the development of the law relating to hiring and firing, together with a set of interviews of 61 manufacturing employers in the province of Brescia in Northern Italy. The survey has allowed us to quantify the extent of turnover costs on the total labor costs. Our research complements econometric studies which look at the structure of adjustment costs and examine statistically how employment reacts to shocks. Those studies test for the

existence, shape and structure of these costs but they can neither isolate their institutional origin nor determine and measure their different components. We attempt to do this.

#### Demeza, David E.

PD June 1995. TI The Borrower's Curse: Optimism, Finance and Entrepreneurship. AU Demeza, David E.; Southey, George. AA University of Exeter. SR University of Exeter, Department of Economics Discussion Paper: 95/02; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 19. PR no charge. JE D82, D23, G21. KW Small Business. Asymmetric Information. Credit Markets.

AB This paper argues that most of the facts characterizing small-scale businesses, including high failure rates, reliance on bank credit rather than equity finance, relatively low interest rate margins, and credit rationing, can be explained by a tendency for those who are excessively optimistic to dominate new entrants. Drawing on findings in psychology, we model entrants as relatively naive optimizers. Banks on the other hand are viewed as well informed and efficient processors of information.

#### Dermine, J.

PD March 1995. TI Pitfalls in the Application of RAROC, With Reference to Loan Management. AA INSEAD. SR INSEAD, Working Papers: 95/58/FIN; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 12. PR not available. JE G21, G24, G31. KW RAROC. Loan Management. Risk Adjusted Return.

AB The purpose of the paper is to discuss four pitfalls commonly found in the application of RAROC to loan management. These are, respectively, the use of a single hurdle rate, the timing of profit recognition, the time horizon for equity allocation, and the under-identified benefits of portfolio diversification. Without explicit recognition of these pitfalls by senior bank management, the application of RAROC to risk-adjusted performance measurement can lead to misleading information.

PD October 1995. TI European Banking Integration, Ten Years After. AA INSEAD. SR INSEAD, Working Papers: 95/92/FIN; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 41. PR not available. JE F33, F36, G21. KW European Market. International Banks.

AB Ten years ago, the White Paper on the Completion of the Single Market announced the integration of European banking markets. The purpose of this essay is to identify four public issues that remain to be addressed. Home country control of international banks needs to be complemented by host country control. The deposit guarantee schemes should be modified by rendering insured deposits "first order claim". A European authority is needed to ensure that banks do not exploit domestic rents to subsidize international activities. Finally, tax evasion is a fourth issue that remains to be addressed.

PD December 1995. TI European Banking With a Single Currency. AA INSEAD. SR INSEAD, Working Papers: 96/03/FIN; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 59. PR not available. JE F33, F36. KW Single Currency. European Banking. Financial Markets. International Finance.



**AB** At the Madrid summit in December 1995, the EU heads of state or government endorsed a three-phase plan for the introduction of the single currency. The purpose of the paper is to identify how, besides an obvious fall in revenue from intra-European currencies trading, a single currency will alter fundamentally and permanently European banking markets. A common currency will likely change the sources of competitive advantage in various markets such as those of government bonds and their fast growing appendices the interest rate derivative markets, of corporate bonds and equities, of foreign exchange, and of fund management.

**TI** Unexpected Inflation and Bank Stock Returns, The Case of France 1977-1991. **AU** Lajeri, F.; Dermine, J.

#### Devereux, Michael B.

**PD** June 1995. **TI** Political Uncertainty, Capital Taxation, and Growth. **AU** Devereux, Michael B.; Wen, Jean-Francois. **AA** Devereux: University of British Columbia. Wen: Wilfred Laurier University. **SR** University of British Columbia, Department of Economics Discussion Paper: 95/17; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 13. **PR** 20 cents per page Canadian to other than educational institutions. **JE** P16, H21, D72, D81. **KW** Economic Growth. Political Uncertainty. Capital Taxation.

**AB** In cross-country studies of economic growth, average growth rates of GNP per capita tend to be negatively associated both with the size of government and with measures of political instability. We show that a linear endogenous growth model with a very simple model of government spending and taxation in the face of political uncertainty can account for both empirical correlations. In addition, the model predicts that both correlations are intimately linked: thus greater political instability leads to both lower growth rates and a higher share of government spending in GNP.

**TI** Exchange Rate Dynamics and International Transmission in a Model of Pricing-To-Market. **AU** Betts, Caroline; Devereux, Michael B.

**TI** Exploring General Equilibrium Implications of Skill-Biased Technological Change. **AU** Beaudry, Paul; Devereux, Michael B.

#### Dickhaut, John

**TI** Price Formation in Double Auctions. **AU** Gjerstad, Steven; Dickhaut, John.

#### Dierker, Egbert

**PD** 1995. **TI** Profit Maximization, Relative Prices, and the Maximization of Shareholders' Real Wealth. **AU** Dierker, Egbert; Grodal, Birgit. **AA** Dierker: Universitat Wien. Grodal: Kobenhavns Universitet. **SR** University of Copenhagen, Institute of Economics, Discussion Paper: 95/07; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. **PG** 24. **PR** not available. **JE** D21, D43, D50. **KW** Imperfect Competition. Relative Prices. Absolute Prices. Shareholder's Wealth.

**AB** See the abstract for Dierker and Grodal (1996), University of Copenhagen Institute of Economics Discussion Paper, 96/05.

**PD** 1996. **TI** The Price Normalization Problem in Imperfect Competition and the Objective of the Firm. **AU** Dierker, Egbert; Grodal, Birgit. **AA** Dierker: Universitat Wien. Grodal: University of Copenhagen. **SR** University of Copenhagen, Institute of Economics, Discussion Paper: 96/05; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. **PG** 32. **PR** not available. **JE** D21, D43, D50. **KW** Shareholder's Wealth. Oligopolistic Competition. Relative Prices. General Equilibrium.

**AB** General equilibrium models of oligopolistic competition give rise to relative prices only without determining the price level. It is well-known that the choice of a number or, more generally, of a normalization rule converting relative prices into absolute prices entails drastic consequences for the Nash equilibria. In this paper we show that, given a firm has chosen a particular profit function as its objective, profit maximization can be expressed in such a way that it depends on relative prices only. However, the choice of such an objective function need not be in the interest of the shareholders. This problem is overcome by relating the profits of a firm to the aggregate demand of its shareholders. We propose a definition of the objective of a firm, called maximization of shareholders' real wealth, which does not depend on any price normalization. Real wealth maxima are shown to exist under certain conditions. Moreover, we consider an oligopolistic market and prove the existence of a Nash equilibrium in which each firm maximizes the real wealth of its shareholders. As a consequence, there is no need for absolute prices in the theory of imperfect competition.

#### Diewert, W. Erwin

**PD** January 1995. **TI** Axiomatic and Economic Approaches to Elementary Price Indexes. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 95/01; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 60. **PR** 20 cents per page Canadian to other than educational institutions. **JE** C43, C81, E31, O47. **KW** Price Indexes. Bias. Consumer Price Indexes. Aggregation Over Commodities.

**AB** The paper explores various approaches to the problems involved in collecting and aggregating price and quantity information at the lowest level of aggregation. The axiomatic approaches of Eichhorn and Dalen are explored as are the economic approaches of Reinsdorf and Moulton. The unit value approach of Walsh and Davies is recommended if price and quantity information is available. Finally, the paper catalogues various sources of bias in consumer price indexes and concludes that U.S. consumer price inflation had an upward bias in the .75 to 1.7% per year range during the 1980's.

**PD** January 1995. **TI** Price and Volume Measures in the System of National Accounts. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 95/02; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 63. **PR** 20 cents per page Canadian to other than educational institutions. **JE** C43, E31, O47. **KW** Price Indexes. National Income Accounting. Quality Change. International Comparisons.

**AB** The paper is an extensive review of chapter 16 in the

System of National Accounts, 1993 written by Peter Hill. The basic principles for measuring price and quantity change in the National Accounts are explained. The paper also presents some new material on the consistency of superlative indexes with indexes which are additive in their components. Some new material on the treatment of quality change is also presented which indicates that traditional Statistical Agency treatments of this issue will lead to upward bias in price indexes. The literature on sources of bias in consumer price indexes is also reviewed.

**PD** September 1995. **TI** On the Stochastic Approach to Index Numbers. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 95/31; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 45. **PR** 20 cents per page Canadian to other than educational institutions. **JE** B10, C43, C51, E31. **KW** Index Numbers. Reliability. Stochastic Approaches.

**AB** The paper reviews the recent rebirth of the stochastic approach to index number theory. The earlier contributions of Jevons, Edgeworth and Bowley are also reviewed. The stochastic approach treats each price relative as an estimate of the amount of inflation between the base period and the current period. By averaging these price relatives, a more accurate estimate of price change is obtained and a confidence interval for the amount of inflation can be derived. The paper criticizes the stochastic approach by following Keynes in asserting that the price relatives must be weighted according to their economic importance. Once weights are brought into the picture, we must use the test or economic approaches to index number theory to determine the precise nature of the weights. The paper concludes by defining measures of price dispersion that are appropriate for the test or economic approaches.

**PD** October 1995. **TI** Data Envelopment Analysis: A Practical Alternative? **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 95/30; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 21. **PR** 20 cents per page Canadian to other than educational institutions. **JE** C14, C43, C61, D61. **KW** Efficiency Measurement. Data Envelopment Analysis. Le Chatelier Principle. Productivity. Nonparametric Measurement.

**AB** The paper gives a brief review of the nonparametric approach to efficiency measurement or Data Envelopment Analysis as it is known in the operations research literature. Inequalities are derived between the efficiency measures when different assumptions are made on the technology sets or on the behavior of managers. Of particular interest is the derivation of a Le Chatelier Principle for measures of allocative inefficiency. Finally, DEA methods for measuring the relative efficiency of production units are compared with the more traditional index number and econometric methods.

**PD** January 1996. **TI** Seasonal Commodities, High Inflation and Index Number Theory. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 96/06; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 77. **PR** 20 cents per page Canadian to other than educational institutions. **JE** B23, C43, D11, E31,

**M41. KW** Aggregation of Commodities. Consumer Theory. Index Numbers. Inflation.

**AB** This paper studies the problems of measuring economic growth under conditions of high inflation. Traditional bilateral index number theory implicitly assumes that variations in the price of a commodity within a period can be ignored. In order to justify this assumption under conditions of high inflation, the accounting period must be shortened to a quarter, month or possibly a week. However, once the accounting period is less than a year, the problem of seasonal commodities is encountered (i.e., in some subannual periods, many seasonal commodities will be unavailable, and hence the usual bilateral index number theory cannot be applied). The present paper systematically reviews the problems of index number construction when there are seasonal commodities and high inflation. Various index number formulae are justified from the viewpoint of the economic approach to index number theory by making separability assumptions on consumers' intertemporal preferences. We find that accurate economic measurement under conditions of high inflation is very complex. Statistical Agencies should produce at least three different types of index: (i) year over year "monthly" price and quantity indexes; (ii) a short term "month to month" price index of nonseasonal commodities and (iii) annual Mudgett-Stone quantity indexes that use the short term price index in (ii) to deflate the seasonal prices.

**PD** February 1996. **TI** Comments on CPI Biases. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 96/07; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 16. **PR** 20 cents per page Canadian to other than educational institutions. **JE** C43, C81, E31, O47. **KW** Consumer Price Index. Social Cost of Living. Substitution Bias. New Goods Bias.

**AB** The paper discusses various sources of bias in the U.S. CPI. Available research indicates that the U.S. Consumer Price Index overstated inflation approximately 1.3 to 1.7 percent per year.

### Dimelis, Sophia

**PD** September 1994. **TI** Trade with Central and Eastern Europe: The Case of Greece. **AU** Dimelis, Sophia; Gatsios, Konstantine. **AA** Athens University of Economics and Business. **SR** Centre for Economic Policy Research, Discussion Paper: 1005; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 49. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F14, F15, F17, F21. **KW** Patterns of Trade. Intra-Industry Trade. Comparative Advantage. Export Specialization. Foreign Investment.

**AB** This paper provides an analysis of the impact of economic reforms in the Central and East European countries (CEECs) on Greece in terms of trade flows and investment activity. We make a number of key observations. We conclude that for the near future prospects of trade between Greece and the CEECs are very optimistic and that the pressures exercised by CEEC products on Greece's exports in the Union's market will rather be mild. Furthermore a new, dynamic regional market is emerging in the Balkans in which Greece is called to play a central role.

**Dissanaike, Gishan**

PD September 1994. TI Do Stockmarket Investors Overreact? The UK Evidence. AA Judge Institute of Management Studies and University of Cambridge. SR University of Cambridge. Discussion Papers in Accounting and Finance: AF8; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 29. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE G12, G14. KW Overreaction. Stock Market. Efficient Markets. Contrarian Strategies. Anomalies.

AB This paper examines the evidence on the stock market overreaction hypothesis. The study is unique in the area because it is restricted to larger and better-known listed companies, whose shares are more frequently traded. This restriction minimizes the influence of bid-ask biases and infrequent trading, and reduces the possibility that reversals are primarily a small-firm phenomenon. The paper also investigates whether reversals can be explained by time-varying risk. They study employs unbiased methods of return computation and uses data from 1975 to 1991 for nearly 1000 UK companies. Overall, the evidence appears to be consistent with the overreaction hypothesis, subject to certain qualifications.

PD February 1996. TI Long-Term Stock Price Reversals in the UK: Evidence from Regression Tests. AA Judge Institute of Management Studies and University of Cambridge. SR University of Cambridge. Discussion Papers in Accounting and Finance: AF24; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 29. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE G11, G14. KW Contrarian Strategies. Overreaction. Efficient Markets. Anomalies. Reversal Coefficient.

AB This paper investigates the evidence on long-term stock price reversals in the UK, using cross-sectional regression techniques. Although a few studies have used regression techniques to identify evidence of reversals, there has surprisingly been little discussion about the implications of the chosen regression specification. We discuss the implications of two alternative specifications, and test them empirically. We demonstrate that the "conventional" model used in the overreaction literature embodies the assumption that price reversals are stronger for winners than for losers, a point which has not been recognized before. We also derive an alternative specification which assumes that price reversals are symmetric, but we find that the "conventional" model performs slightly better than this "derived" model- we interpret this to mean that price reversals for winners are indeed stronger than those for losers, contrary to what was thought in De Bondt and Thaler (1985). Overall, we find evidence of stock price reversals, even after controlling for time-varying risk and restricting the study to larger, listed companies (i.e., companies which are actively traded; more heavily regulated; and extensively analyzed by market commentators, analysts, and institutional investors).

**Dolado, Juan J.**

TI Wage Bargaining in Industries with Market Power. AU Padilla, A. Jorge; Bentolila, Samuel; Dolado, Juan J.

**Donald, Stephen G.**

PD October 1995. TI Differences in Earnings and Wage Distributions Between Canada and the U.S.: An Application of

a Semi-Parametric Estimator of Distribution Functions with Covariates. AU Donald, Stephen G.; Green, David A.; Paarsch, Harry J. AA Donald: Boston University. Green: University of British Columbia. Paarsch: University of Western Ontario. SR University of British Columbia, Department of Economics Discussion Paper: 95/34; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 57. PR 20 cents per page Canadian to other than educational institutions. JE J31, I32, C14. KW Earnings Inequality. Hazard Functions. Unions.

AB We construct a tractable, flexible, semi-parametric estimator of cumulative distribution functions (CDF's) for non-negative random variables that admits large numbers of covariates. The estimator applies hazard function-based techniques from the spell duration literature to CDF and generalized Lorenz curve estimation for earnings and wages. Using these methods, we investigate differences in inequality between Canada and the U.S.. We find that Canada's earnings density has a thinner left tail because low educated workers have high pay and a thinner right tail because of a lower proportion of highly educated workers in Canada. Unions appear to play a large role in these outcomes.

**Donaldson, David**

TI Income Inequality Measurement: The Normative Approach. AU Blackorby, Charles; Bossert, Walter; Donaldson, David.

TI Intertemporally Consistent Population Ethics: Birth-Date Dependent Classical Principles. AU Blackorby, Charles; Bossert, Walter; Donaldson, David.

TI Uncertainty and Critical-Level Population Principles: A Static Model. AU Blackorby, Charles; Bossert, Walter; Donaldson, David.

**Donaldson, John B.**

TI Asset Pricing Implications of Real Market Frictions. AU Danthine, Jean Pierre; Donaldson, John B.

**Dooley, Michael P.**

PD November 1995. TI A Survey of Academic Literature on Controls Over International Capital Transactions. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/127; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 38. PR not available. JE F34, G15, G28. KW Capital Gains. International Lending. Capital Controls.

AB This paper reviews recent theoretical and empirical work on controls over international capital movements. Theoretical contributions reviewed focus on "second best" arguments for capital market restrictions as well as arguments based on multiple equilibria. The empirical literature suggests that controls have been "effective" in the narrow sense of influencing yield differentials. But there is little evidence that controls have helped governments meet policy objectives, with the exception of reduction in the governments' debt service costs, and no evidence that controls have enhanced economic welfare in a manner suggest by theory.

**Dove, C.**

TI Finding the High Flying Entrepreneurs: A Cautionary Tale. AU Birley, S.; Muzyka, Daniel F.; Dove, C.; Rossell,

G.

**Doz, Y.**

TI Strategy Formulation as Disciplined Imagination.  
 AU Szulanski, G.; Doz, Y.

**Driver, Rebecca**

PD January 1996. TI How Robust are FEERs?  
 AU Driver, Rebecca; Wren-Lewis, Simon. AA University  
 of Exeter. SR University of Exeter, Department of  
 Economics Discussion Paper: 96/06; Department of  
 Economics, University of Exeter, Amory Building, Rennes  
 Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 15.  
 PR no charge. JE F31, F32. KW Fundamental  
 Equilibrium. Exchange Rates.

AB Fundamental Equilibrium Exchange Rates, or FEERs, are  
 defined as the real exchange rate which would prevail if the  
 economy were to be in internal and external equilibrium. As  
 such they have been widely used both for policy purposes and  
 as a method of calculating the level to which the real exchange  
 rate might tend in the medium run. This paper addresses the  
 issue of the sensitivity of FEERs to changes in the assumptions  
 underlying these calculations. We quantify the sensitivity of the  
 FEER calculations to various parameters and inputs, and show  
 that in many cases the changes induced in the FEER are large.

PD April 1996. TI European Monetary Union,  
 Asymmetric Shocks and Inertia. AU Driver, Rebecca;  
 Wren-Lewis, Simon. AA University of Exeter.  
 SR University of Exeter, Department of Economics  
 Discussion Paper: 96/07; Department of Economics,  
 University of Exeter, Amory Building, Rennes Drive, Exeter  
 Devon, EX4 4RJ, ENGLAND. PG 10. PR no charge.  
 JE F33, F41, F42. KW European and Monetary Union.  
 Asymmetric Shocks. Inertia.

AB This paper assesses the scale of the costs of European  
 Monetary Union when shocks are asymmetric. This is done  
 considering time consistent policies within a small theoretical  
 two country model, with parameter values chosen from  
 empirical work. The model builds on earlier work by  
 incorporating a forward looking inflation mechanism. Our  
 results suggest that there are significant costs associated with  
 Monetary Union, particularly when fiscal policy is not used as a  
 stabilization tool.

**Dumenil, Gerard**

PD September 1995. TI The Great Depression: a  
 Paradoxical Event? AU Dumenil, Gerard; Levy, Dominique.  
 AA Dumenil: CNRS, MODEM, and University of Paris X-  
 Nanterre. Levy: CNRS and CEPREMAP. SR CEPREMAP  
 Discussion Paper: 9510; CEPREMAP, 142 rue du Chevaleret,  
 75013 Paris, FRANCE. PG 65. PR 25 F.F. JE N11,  
 N12. KW Great Depression. Heterogeneity. Financial Crisis.  
 AB When considered from the viewpoint of the historical  
 trends of technology and distribution, the Great Depression  
 appear as a paradoxical event. It actually interrupted several  
 very favorable trends: rapid growth of labor productivity, a  
 rising profit rate, etc. We contend that the premature  
 obsolescence of a large segment of the capital stock, in relation  
 to this rapid technical progress, is a crucial factor in the  
 analysis of the Great Depression. It explains how a recession  
 was transformed into a depression in the early 1930s. New  
 technical opportunities account for the rise of stock prices  
 during the 1920s, but the effects of the collapse of October

1929 were corrected by the swift action of monetary  
 authorities. The duration of the decline in output set in motion a  
 financial crisis, at first a credit-supply crisis, i.e., a disruption of  
 the willingness to lend of the banking system, due to increasing  
 defaults. The Fed provided banks with reserves, but let the  
 credit crisis develop into a banking crisis (the failure of banks).  
 Although the size of the problem to be tackled was quite  
 unusual, the weaknesses of the existing institutional  
 environment, including monetary institutions, must be  
 acknowledged. A more daring thesis is then formulated which  
 interprets the depression, at a higher level of abstraction, as a  
 crisis expressing the difficult emergence of a new stage of  
 Capitalism, Managerial Capitalism.

**Dunn, Thomas A.**

TI The Effects of School and Family Characteristics on the  
 Return to Education. AU Altonji, Joseph G.; Dunn, Thomas  
 A.

**Dutta, S.**

TI Software Development Effort Estimation Based on  
 Significant Productivity Factors: General and Company  
 Specific Models. AU Maxwell, K.; Van Wassenhove, Luk N.;  
 Dutta, S.

**Easterly, William**

TI Policy, Technology Adoption and Growth. AU Levine,  
 Ross; Easterly, William; King, Robert; Rebelo, Sergio.

**Eaton, Curtis**

PD October 1995. TI Endogenous Cartel Formation.  
 AU Eaton, Curtis; Eswaran, Mukesh. AA Eaton: Simon  
 Fraser University. Eswaran: University of British Columbia.  
 SR University of British Columbia, Department of  
 Economics Discussion Paper: 95/32; Department of Economics,  
 University of British Columbia, 1873 East Mall, Room 997,  
 Vancouver, B.C. V6T 1Z1 CANADA. PG 22. PR 20  
 cents per page Canadian to other than educational institutions.  
 JE D43, L13, C73. KW Cartels. Collusion. Supergames.

AB This paper investigates, in a supergame framework, the  
 endogenous formation of cartels in which cheating on the cartel  
 agreement results in the ejection of the defector from the cartel  
 while collusion continues amongst the non-cheating members.  
 When firms produce heterogeneous goods and set prices, cartels  
 comprising a small fraction of the industry's firms are shown to  
 be viable. The emergence of two or more cartels within the  
 same industry is seen not only to be a distinct possibility but  
 also to be quite likely.

**Eaton, Jonathan**

PD March 1995. TI Trade in Ideas: Patenting and  
 Productivity in the OECD. AU Eaton, Jonathan; Kortum,  
 Samuel. AA Eaton: Boston University and National Bureau  
 of Economic Research. Kortum: Board of Governors of the  
 Federal Reserve System and National Bureau of Economic  
 Research. SR National Bureau of Economic Research,  
 Working Paper: 5049; National Bureau of Economic Research,  
 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 27.  
 PR \$5.00. JE O41, O31. KW Europe. Technological  
 Innovation. Growth.

AB We develop and estimate a model of technological  
 innovation and its contribution to growth at home and abroad.  
 International patents indicate where innovations come from and

where they are used. Countries grow at a common steady-state rate. A country's relative productivity depends upon its capacity to absorb technology. We estimate that, except for the United States, OECD countries derive almost all of their productivity growth from abroad.

### Eftekhari, B.

PD November 1995. TI On the Characteristics of the Measures of Risk in Finance. AU Eftekhari, B.; Satchell, S. E. AA University of Cambridge. SR University of Cambridge, Discussion Papers in Accounting and Finance: AF19; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 24. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE G11, D81, C15. KW Risk Measures. Price Variance. Monte Carlo.

AB The authors investigate the statistical properties of measures of risk, with a view to explaining the reasons for the lack of use in finance of risk measures other than the variance. They consider as their examples the semi-variance, the lower partial moment, the Gini, and the absolute deviation. They conduct a Monte Carlo study, generating random numbers, to study the behavior of these measures of risk. They also use bootstrap methods, by drawing random observations from real financial returns data, for the same purpose.

PD January 1996. TI International Investors' Exposure to Risk in Emerging Markets: a Study Within and Between Major Currencies. AU Eftekhari, B.; Satchell, S. E. AA University of Cambridge. SR University of Cambridge, Discussion Papers in Accounting and Finance: AF20; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 30. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE G15, D81, O16. KW Risk. Developing Markets.

AB In this paper the authors examine the difference in emerging market betas taken across four major currencies: US Dollars, Sterling, Yen, and German Marks. They find that the mean-variance betas are in the majority of cases statistically similar to lower partial moment betas. This suggests that the mean-variance betas are robust to the non-normality in the data. The difference between the two betas has also become less significant in recent years. The authors also present evidence that betas obtained from both risk measures, and calculated from returns denominated in different currencies, have the same ordinal association. They conclude that international investors can carry on using the mean-variance beta in assessing risk in emerging markets, though investors should not give it a conventional equilibrium interpretation.

### Eichengreen, Barry

TI Can Foreign Aid Accelerate Stabilization? AU Casella, Alessandra; Eichengreen, Barry.

PD June 1994. TI Institutions and Economic Growth: Europe After World War II. AA University of California, Berkeley. SR Centre for Economic Policy Research, Discussion Paper: 973; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 44. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE N10, N01, N20. KW Europe. Institutions. Growth.

AB European economic growth in the quarter of a century

that ended in 1973 outstripped growth in any period of comparable length before or since. The elements of Europe's growth miracle -- wage moderation, high investment and rapid export growth -- were delivered by a tailor-made set of domestic and international arrangements -- on the domestic side the social market economy, on the external side international agreements and supranational institutions -- that solved problems of commitment and cooperation that would have otherwise hindered the resumption of growth.

TI Restraining Yourself: Fiscal Rules and Stabilization. AU Bayoumi, Tamim A.; Eichengreen, Barry.

PD October 1994. TI The Geography of the Gold Standard. AU Eichengreen, Barry; Flandreau, Marc. AA Eichengreen: University of California, Berkeley. Flandreau: OCFE. SR Centre for Economic Policy Research, Discussion Paper: 1050; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 30. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F02, F31, N10. KW Gold Standard. Bimetallism. International Monetary System.

AB In this paper we chart the geography of the gold standard. We highlight the late date of the move to gold and the variety of transition strategies. Whether a country with a currency convertible into specie operated a gold, silver or bimetallic standard at mid-century depended not so much on whether it was rich or poor as on the monetary standard of the foreign country or countries to which its transactions were linked. When it came to the distinction between specie convertibility and inconvertibility, however, domestic economic conditions came into play. In particular, there was a strong correlation between economic development, as proxied by the level of per capita incomes, and possession of a convertible currency. Most countries went onto the gold standard between the 1870s and the first decade of the twentieth century. We enumerate the factors propelling this transition and analyze variations in its timing. Factors shaping the course of this transition include the level of economic development, the magnitude of reserves relative to world specie markets, whether reserves were concentrated at the central bank, and the presence or absence of imperial ties.

TI Is Regionalism Simply a Diversion? Evidence from the Evolution of the EC and EFTA. AU Bayoumi, Tamim A.; Eichengreen, Barry.

### Eisenhardt, K.M

TI The Evolution of Intracorporate Domains: Divisional Charter Losses in High Technology, Multidivisional Corporations. AU Galunic, D.C.; Eisenhardt, K.M.

### Eiteljorge, Uwe

PD December 1995. TI The Uruguay Round and Net Food Importers. AU Eiteljorge, Uwe; Shiells, Clinton. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/143; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 27. PR not available. JE F13, F15, F17. KW GATT. Agricultural Reform.

AB This paper attempts to assess the incremental external financing requirements occasioned by changes in world food prices, due to implementation of the Uruguay Round Agreement on Agriculture, for a sample of 57 developing

countries. Based on estimates of changes in food prices due to the Round obtained in previous studies, and on detailed data on food trade by country and commodity, the present study shows that the increase in net food import costs are likely to be smaller than 4 percent of net food imports over a period of six years for the countries considered, although for some of the larger trading nations the effect may exceed US\$10 million.

#### Elliott, Graham

PD 1995. TI International Business Cycles and the Dynamics of the Current Account. AU Elliott, Graham; Fatas, A. AA Elliott: University of California, San Diego. Fatas: INSEAD. SR INSEAD, Working Papers: 95/55/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 20. PR not available. JE F14, F21, F32, F41. KW Transmission of Shocks. Current Account. Capital Mobility. Productivity Shock. Investment.

AB This paper analyzes the transmission of shocks across countries and how the responses of investment and the current account differ depending on the degree of propagation of shocks. We explore both issues by estimating a structural model for the Japanese, German and US economies where productivity shocks propagate through trade. We find that there is a strong asymmetry in the propagation of shocks. Shocks to the US propagate quickly to the other two economies while German and Japanese shocks have little impact in other countries' productivity. When we explore the responses of investment and the current account to each of the shocks, we find that productivity increases lead to domestic investment booms and current account deficits. However, we also find that foreign investment tends to react positively to productivity shocks, even when the shock is purely national. This result, that foreign investment does not decrease in response to productivity shocks, contradicts the predictions of a standard open-economy model with perfect capital mobility where, in response to country-specific shocks, domestic and foreign investment should move in opposite directions. We also find quantitative differences among the three countries in the behavior that their current account and investment growth rates show in response to domestic productivity changes. We interpret this result as evidence of different degrees of capital mobility among the countries in our sample.

#### Engsted, Tom

PD August 1995. TI Multicointegration and Present Value Relations. AU Engsted, Tom; Gonzalo, Jesus; Haldrup, Niels. AA Engsted and Haldrup: University of Aarhus. Gonzalo: Boston University. SR University of Aarhus, Department of Economics, Memo: 1995/13; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK/8000 Aarhus C, DENMARK. PG 25. PR no charge. JE C12, C13, C22, E43. KW Present Value. Cointegration. Multicointegration. Term Structure. Farmland Prices.

AB It is well-known that if the forcing variable of a present value (PV) model is an integrated process, then the model will give rise to a particular cointegrating restriction. In this paper we demonstrate that if the PV relation is exact, such that no additive error term appears in the specification, then the variables will be multi-cointegrated such that the cumulation of cointegration errors at one level of cointegration will cointegrate with the forcing variable. Multicointegration thus delivers a statistical property of the data that is necessary,

though not sufficient, for this class of models to be valid. Estimation and inference of the model are discussed and it is shown that provided the PV relation is exact the discount factor of the model can be estimated with a rate of convergence that is faster than the usual super-consistent rate characterizing estimators in the cointegration literature. Finally, the paper is completed with two empirical analysis of PV models using term structure data and farmland data, respectively.

PD February 1996. TI Estimating the LQAC Model With I(2) Variables. AU Engsted, Tom; Haldrup, Niels. AA University of Aarhus. SR University of Aarhus, Department of Economics, Memo: 1996/1; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK/8000 Aarhus C, DENMARK. PG 21. PR no charge. JE C12, C32, E41. KW Adjustment Costs. Error Correction. Money Demand. Rational Expectations. Multicointegration.

AB This paper derives a method for estimating and testing the Linear Quadratic Adjustment Cost (LQAC) model when the target variable and some of the forcing variables follow I(2) processes. Based on a forward-looking error-correction formulation of the model it is shown how to obtain strongly consistent estimates of the structural long-run parameters and the adjustment cost parameter from both a linear and a non-linear cointegrating regression, where first-differences of the I(2) variables are included as regressors (multicointegration). Further, based on the estimated parameter values, it is shown how to test and evaluate the LQAC model using a VAR approach. In an empirical application using UK money demand data, the non-linear multicointegrating regression delivers an economically plausible estimate of the adjustment cost parameter. However, the exact restrictions implied by the LQAC model under rational expectations are strongly rejected.

#### Escriva, Jose Luis

PD not available. TI The Interest Rate Transmission Mechanism: Sectorial Estimates for Spain. AU Escriba, Jose Luis; Haldane, Andrew G. AA Escriba: Banco de Espana. Haldane: Bank of England. SR Banco de Espana Documento de Trabajo: 9414; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcalá, 50, 28014 Madrid. PG 63. PR not available. JE C51, E52. KW VAR. Monetary Policy.

AB This paper aims to provide some sectorial estimates of the monetary transmission mechanism in Spain. Using a Vector Autoregressive (VAR) methodology, we look to trace through the effects of an exogenous monetary impulse upon the intermediate and final target variables of policy. Provided this mapping between (exogenous) instrument and (endogenous) intermediate and final variables is valid, such an exercise offers meaningful estimates of the size and speed of the effects of a monetary perturbation upon output and prices. And, as important from an intermediate target perspective, it is indicative of the dominant mechanisms through which monetary policy is propagated. Evidently, these issues are of direct policy relevance.

#### Estrada, Angel

TI Durable Consumption and House Purchases: Evidence From Spanish Panel Data. AU Bover, Olympia; Estrada, Angel.

PD not available. TI Investment and Financial Costs:

Spanish Evidence With Panel Data. AU Estrada, Angel; Valles, Javier. AA Banco de Espana. SR Banco de Espana Documento de Trabajo: 9506; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. PG 41. PR not available. JE E13, E22, E43, L60. KW Neoclassical Model. Manufacturing Firms. Investment Model. Interest Rates.

**AB** This paper analyzes the interrelatedness of investment and financial variables with a panel of Spanish manufacturing firms. The neoclassic model of investment is rejected due to its correlation with financial variables. Alternatively, an investment model in which there is a premium on the cost of external funds is accepted. This premium depends on the debt level and the asset structure of the firms and we estimate that it represents an average cost of 0.3 percentage points above the market interest rate. We find that recently established and small firms, because of their financial characteristics, have a higher premium cost, implying a discount rate between 0.5 and 1 percentage point below that of the remaining firms. Nevertheless, these additional costs are not significant at firms which distribute dividends in consecutive periods.

### Eswaran, Mukesh

TI Endogenous Cartel Formation. AU Eaton, Curtis; Eswaran, Mukesh.

PD November 1995. TI One Explanation for the Demographic Transition in Developing Countries. AA University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 95/43; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG not available. PR 20 cents per page Canadian to other than educational institutions. JE J13, J18, E21. KW Child Mortality. Fertility. Demographic Transition.

**AB** This paper considers, in an overlapping generations model, the fertility choice of parents confronted with the possibility of child mortality. The motive for having children is assumed to be old age security and, therefore, not altruistic. It is shown first in a partial equilibrium setting that reductions in child mortality can reduce fertility more than commensurately, inducing a demographic transition from high to low steady state population growth rates. In a general equilibrium setting in which there is a fixed factor (land), it is shown that a marginal reduction in child mortality from high levels can lower the standard of living of the steady state equilibrium population. At low levels of mortality, however, a marginal reduction in the mortality rate can lower the equilibrium level of population and raise the standard of living in the steady state. The paper suggests one explanation for the differences in the demographic experiences of England and France in the last two centuries. Finally, the paper draws the policy implication for developing countries that increasing government expenditure to reduce child mortality can hasten the demographic transition.

### Evans, Roberts

TI Renegotiation in Repeated Games With Transfers. AU Baliga, Sandeep; Evans, Roberts.

### Evstigneev, Igor V.

PD November 1995. TI Metonymy and Cross Section Demand. AU Evstigneev, Igor V.; Hildenbrand, Werner; Jerison, Michael. AA Evstigneev: Academy of Sciences of Russia. Hildenbrand: University of Bonn. Jerison: State

University of New York at Albany. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/496; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 25. PR no charge. JE O20, D11. KW Cross-Section Demand. Expenditure Data. Metonymy Hypothesis. Law of Demand.

**AB** Cross-section consumer expenditure data are frequently used to make conclusions about consumer demand behavior. Such conclusions, however, can only be justified under certain assumptions, which are often left unstated in the empirical demand literature. An assumption of this type, the metonymy hypothesis, was stated rigorously and then exploited by Hardle, Hildenbrand and Jerison when analyzing the monotonicity property of aggregate demand functions. The purpose of the present paper is to examine the metonymy hypothesis in more detail. We prove that the distribution of demand vectors derived from not necessarily metonymic population is identical to the distribution derived from some metonymic ones. This implies, in particular, that the metonymy hypothesis cannot be rejected or confirmed on the basis of data from a single cross section.

### Fagnart, Jean-Francois

PD 1996. TI Idiosyncratic Uncertainty, Capacity Utilization and the Business Cycle. AU Fagnart, Jean-Francois; Licandro, Omar; Portier, Franck. AA Fagnart: University of Copenhagen. Licandro: FEDEA and Universidad Carlos III de Madrid. Portier: CEPREMAP, MAD and Universite de Rouen. SR University of Copenhagen, Institute of Economics, Discussion Paper: 96/06; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. PG 20. PR not available. JE D43, E22, E32. KW Capacity Utilization. Imperfect Competition. Business Cycle. Idiosyncratic Uncertainty.

**AB** In a stochastic dynamic general equilibrium framework, we introduce the concept of variable capacity utilization (as opposed to the concept of capital utilization). We consider an economy where imperfectly competitive firms use a putty-clay technology and decide on their productive capacity level under uncertainty. An idiosyncratic uncertainty about the exact position of the demand curve faced by each firm explains why some productive capacities may remain idle in the sequel and why individual capacity utilization rates differ across firms. The capacity under-utilization at the aggregate level thus hides a diversity of microeconomic situations. The variability of the capacity utilization allows for a good description of some of the main stylized facts of the business cycle, propagates and magnifies aggregate technological shocks and generates endogenous persistence (i.e., the output growth rate displays positive serial correlation).

### Faini, Riccardo

PD May 1994. TI Migration and Growth: The Experience of Southern Europe. AU Faini, Riccardo; Venturini, Alessandra. AA Faini: Universita di Brescia. Venturini: Universita degli Studi di Bergamo. SR Centre for Economic Policy Research, Discussion Paper: 964; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 21. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE O15, J61, O41. KW Migration. Growth.

**AB** Policy-makers in European countries typically complain about the low level of labor mobility within Europe. At the

same time they appear to be increasingly concerned about growing migration pressures from outside the European Community. In this paper, we try to cast some light on the issues of both internal and external labor mobility. We investigate the link between migration and growth. We argue that in a relatively poor sending country, an increase in the wage will have a positive impact on the propensity to migrate (by providing the resources to enable a migrant to move), even if we control for the wage differential with the receiving country. Conversely, if the home country is relatively well off, an increase in the wage there will work towards a reduction in the pressure to migrate. Econometric estimation for Southern Europe over the period 1962-88 provides substantial support for our approach. We estimate the turning point in the migration-income link at around \$4000 in 1985 prices. We predict, therefore, a steady decline in the propensity to migrate from South European countries. Similarly, our results highlight the possibility that the pressure to migrate from North African countries and other developing countries may increase with further growth.

**Fatas, A.**

**TI** International Business Cycles and the Dynamics of the Current Account. **AU** Elliott, Graham; Fatas, A.

**PD** 1995. **TI** Aggregate Demand Externalities, Intermediate Inputs and Multiple Equilibria. **AA** INSEAD. **SR** INSEAD, Working Papers: 95/67/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 7. **PR** not available. **JE** E22, E32. **KW** Multiple Equilibria. Intermediate Inputs. Demand Externalities.

**AB** We show that the presence of intermediate inputs magnifies the multiplier effects of pecuniary aggregate demand externalities in an imperfectly competitive model. In our setting, the presence of intermediate inputs is a necessary condition for the existence of multiple equilibria. Moreover, the range of parameter values for which multiple equilibria are possible is increasing in the share of intermediate inputs.

**PD** 1995. **TI** No News Can Be Good News: Irreversible Investment and Strategic Interaction. **AU** Fatas, A.; Metrick, A. **AA** Fatas; INSEAD. Metrick; Harvard University. **SR** INSEAD, Working Papers: 95/68/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 25. **PR** not available. **JE** D92, E22, E32. **KW** Irreversible Investment. Demand Externalities. Information Quality. Uncertainty.

**AB** This paper introduces an aggregate demand externality into a model of irreversible investment. The central result of the paper establishes the mechanism in which increases in uncertainty can lead to sub-optimal recessions. These inefficient outcomes occur even if agents are allowed to coordinate to the best possible equilibria. The result is driven by the external effects of firms' investment decisions. The "no news can be good news" section draws an analogy between increases in uncertainty and improvements in the quality of information, with the conclusion that an improvement in information may also lead to a sub-optimal recession.

**PD** 1995. **TI** Endogenous Growth and Stochastic Trends. **AA** INSEAD and Centre for Economic Policy Research. **SR** INSEAD, Working Papers: 95/85/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 21. **PR** not available. **JE** E32, O47.

**KW** Output. Long-Run Growth. Productivity Shocks. Cyclical Shocks.

**AB** This paper shows that there exists a strong positive correlation between long-term growth rates and the persistence of output fluctuations in a cross section of countries. We argue that the traditional explanation of persistence, an RBC model with exogenous productivity shocks, cannot produce this correlation. We propose an explanation based on an endogenous growth model with exogenous cyclical shocks. We find that, despite the cyclical nature of the shocks, output fluctuations are persistent and the degree of persistence is an increasing function of long-term growth rates. Growth dynamics become an important component of the transmission of business cycles. We conclude that the analysis of economic fluctuations in models where technological progress is assumed to be exogenous can be misleading.

**Feenstra, Robert C.**

**PD** March 1995. **TI** Estimating the Effects of Trade Policy. **AA** University of California, Davis and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5051; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 44. **PR** \$5.00. **JE** C12, F12, F13. **KW** Oligopoly. International Trade. Empirical Methods. Welfare Loss.

**AB** This paper reviews empirical methods used to estimate the impact of trade policies under imperfect competition. We decompose the welfare effects of trade policy into four possible channels: (i) a deadweight loss from distorting consumption and production decisions; (ii) a possible gain from improving the terms of trade; (iii) a gain or loss due to changes in the scale of firms; and, (iv) a gain or loss from shifting profits between countries. For each channel, we discuss the appropriate empirical methods to determine the sign or magnitude of the effect, and illustrate the results using recent studies. Two other channels by which trade policy affects social or individual welfare -- through changes in wages and changes in product variety -- are discussed more briefly. Recent developments in the analysis of trade policies under perfect competition are also reviewed.

**PD** March 1995. **TI** Exact Hedonic Price Indexes. **AA** University of California, Davis and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5061; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 35. **PR** \$5.00. **JE** C43, C13. **KW** Hedonic Price Indexes. Hedonic Regression.

**AB** The purpose of this paper is to identify conditions under which hedonic price indexes provide an exact measure of consumer welfare. Our results provide a rationale for existing practices in the case where prices equal marginal costs. In that case, both the marginal value of characteristics and a fixed-weight price index can be estimated from a hedonic regression. Using the marginal value of characteristics, we show how to construct bounds on the exact hedonic price index. When prices are above marginal costs then our bounds still apply, but the value of characteristics cannot be measured so easily. Since the price-cost markups are an omitted variable in the hedonic regression, they will bias the coefficients obtained. For a special class of utility functions, we argue that a linear regression will still provide a measure of the marginal value of characteristics, but a log-linear regression will overstate these values.



**Fein, Adam J.**

**TI** Incumbent Defense Strategies Against New Product Entry. **AU** Gatignon, Hubert; Robertson, Thomas S.; Fein, Adam J.

**PD** July 1995. **TI** Patterns of Credible Commitments: Territory and Brand Selectivity in Industrial Distribution Channels. **AU** Fein, Adam J.; Anderson, E. **AA** Fein: University of Pennsylvania. Anderson: INSEAD. **SR** INSEAD, Working Papers: 95/69/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 37. **PR** not available. **JE** L14, M31. **KW** Selectivity. Distribution Channels. Industrial Marketing. Transaction Costs. Credible Commitment.

**AB** Why do firms in distribution channels agree to limit their dealings to a small subset of other firms? We propose a new theoretical rationale based on transaction cost reasoning that explains the paired existence of selectivity agreements in marketing channel relationships. Literature from marketing, economics, and law advance explanations that focus on one party in a relationship desiring some degree of exclusivity from the other. In contrast, we explicitly focus on the strategy and motivation of both parties in a channel relationship, treating the decisions as interrelated. We suggest that both the decision by a manufacturer to limit the number of intermediaries operating in a specific geographic market and the decision by a distributor to limit brand assortment in a product category can be understood as an exchange of pledges, or credible commitments. Selectivity agreements counterbalance exposure to opportunism and neutralize sources of relationship instability, thereby promoting exchange and strengthening an interorganizational relationship. We also consider the opportunity costs when a supplier limits itself to fewer distributors or when a distributor limits itself to fewer brands. Our model is estimated using dyadic data from 362 manufacturer-distributor relationships. The empirical results are broadly supportive of our framework.

**Feldman, Maryann P.**

**TI** Knowledge Spillovers and the Geography of Innovation and Production. **AU** Audretsch, David B.; Feldman, Maryann P.

**Feldman, Robert A.**

**PD** November 1995. **TI** Flexible Estimation of Demand Schedules and Revenue Under Different Auction Formats. **AU** Feldman, Robert A.; Reinhart, Vincent. **AA** International Monetary Fund. **SR** International Monetary Fund, Working Paper: 95/116; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 10. **PR** not available. **JE** C15, D44, C13. **KW** Sealed Bid Auctions. Gold. Demand Curve.

**AB** From 1976 to 1980, the International Monetary Fund sold by sealed-bid auctions one-fifth of its gold stock and systematically experimented with auction format. Based on data from these auctions, this paper uses nonlinear estimation techniques to estimate demand curves under the alternative formats. Demand schedules at the uniform-price auctions were steeper and to the right of those at discriminatory-price auctions, upholding the predictions of bidding theory. Moreover, it is estimated that discriminating-price auctions yielded lower revenue than uniform-price auctions; Monte Carlo simulations suggest that this latter result is both robust and statistically significant.

**Feldstein, Martin**

**PD** March 1995. **TI** Social Security and Saving: New Time Series Evidence. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5054; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 13. **PR** \$5.00. **JE** H55, H24, E21. **KW** Social Security. Saving.

**AB** This paper reexamines the results of my 1974 paper on Social Security and saving with the help of an additional twenty-one years of data. The estimates presented here reconfirm that each dollar of Social Security wealth (SSW) reduces private saving by between two and three cents. The parameter estimates for the postwar period and for the entire sample since 1930 are very similar. The correction of the error in the original SSW series between 1958 and 1971 therefore does not affect the original results. The estimated effect of SSW is robust with respect to the addition of a variety of variables that have been suggested in previous critiques of the original study. In the aggregate, the parameter values imply that the Social Security program currently reduces overall private saving by nearly 60 percent.

**PD** March 1995. **TI** Tax Avoidance and the Deadweight Loss of the Income Tax. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5055; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 38. **PR** \$5.00. **JE** H21, H26, H24. **KW** Deadweight Loss. Tax Evasion. Income Tax.

**AB** The traditional method of analyzing the distorting effects of the income tax greatly underestimates its total deadweight loss as well as the incremental deadweight loss of an increase in income tax rates. Deadweight losses are substantially greater than these conventional estimates because the traditional framework ignores the effect of higher income tax rates on tax avoidance through changes in the form of compensation (e.g., employer paid health insurance) and through changes in the patterns of consumption (e.g., owner occupied housing). The deadweight loss due to the increased use of exclusions and deductions is easily calculated. Because the relative prices of leisure, excludable income, and deductible consumption are fixed, all of these can be treated as a single Hicksian composite good. The compensated change in taxable income induced by changes in tax rates therefore provides all of the information that is needed to evaluate the deadweight loss of the income tax. These estimates using TAXSIM calibrated to 1994 imply that the deadweight loss per dollar of revenue of using the income tax rather than a lump sum tax is more than twelve times as large as Harberger's classic estimate. A marginal increase in tax revenue achieved by a proportional rise in all personal income tax rates involves a deadweight loss of nearly two dollars per incremental dollar of revenue. Repealing the 1993 increase in tax rates for high income taxpayers would reduce the deadweight loss of the tax system by \$24 billion while actually increasing tax revenue.

**Fender, John**

**PD** August 1995. **TI** Protection in a Dynamic Macroeconomic Model with Imperfect Competition. **AU** Fender, John; Yip, Chong K. **AA** Fender: University of Birmingham; Yip: Georgia State University, USA and Chinese University of Hong Kong. **SR** University of Birmingham, Department of Economics, Discussion Paper: 95/22;

Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. PG 33. PR 2 pounds. JE F41, D52. KW Imperfect Competition. Protection. Intertemporal Optimization. Open Economy Macroeconomics.

AB This paper builds a two country intertemporal macroeconomic model similar to one developed recently by Obstfeld and Rogoff. Producers/consumers are imperfect competitors and maximize an intertemporal utility function; utility depends on consumption, real money balances and (negatively) on effort (used in producing output). We use this model to examine both the short-run and steady-state effects of the imposition of a tariff in one of the countries.

### Fernandez De Lis, Santiago

PD not available. TI Classifications of Central Banks by Autonomy: A Comparative Analysis. AA Banco de Espana. SR Banco de Espana Documento de Trabajo: 9604; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. PG 39. PR not available. JE E58, F02, F31, F33. KW Central Banks. Monetary Autonomy. Monetary Policy. Exchange Rate Policy. Comparative Analysis.

AB This article analyzes and compares the different indices that classify central banks on the basis of their autonomy. A number of aspects affecting central bank autonomy are listed and described. These aspects are compared with the facets of central bank independence actually included in the classifications, assessing their degree of coverage. Certain problems related to the elaboration of the indices are addressed. A comparison is also made of the results of the different classifications. Finally, the effect of the Maastricht Treaty-related institutional changes on the independence of EU central banks is estimated, showing a substantial upgrading in absolute and relative terms of this group of countries.

### Ferrer, G.

TI The Residual Life of the Renewal Process: A Simple Algorithm. AU Baganha, M.P.; Pyke, D.F.; Ferrer, G.

TI The Undershoot of the Reorder Point: Tests of an Approximation. AU Baganha, M.P.; Pyke, D.F.; Ferrer, G.

PD June 1995. TI Parts Recovery Problem: The Value of Information in Remanufacturing. AA INSEAD. SR INSEAD, Working Papers: 95/57/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 17. PR not available. JE D83, L60. KW Remanufacturing. Manufacturing. Information Value.

AB In several industries, remanufacturing is an important ingredient of the manufacturing strategy. In a typical remanufacturing site, a job shop is responsible for the disassembly of used machines to obtain parts that will be repaired, or whatever operation is necessary to make it perform and look like new. This paper deals with the value of information in this environment. We compare different scenarios where knowledge acquisition happens at different times in the process, gaining insights about the importance of information systems in remanufacturing.

### Fielding, Antony

PD August 1995. TI Cost Effectiveness in A-Level Courses. The Effect of Subject: a Multilevel Approach. AA University of Birmingham. SR University of

Birmingham, Department of Economics, Discussion Paper: 95/21; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. PG 35. PR 2 pounds. JE I22, I21. KW Educational Cost Effectiveness. Multilevel Models. School League Tables. Subject Grades. Value Added.

AB In 1990, H. Thomas collected data on 12 Institutions which provided GCE advanced level courses. The main object of his analysis was to contrast the cost effectiveness of different institutional types. His unit of analysis was the teaching group, and he used analysis of covariance to control various group and institutional characteristics. This paper describes how the speaker has restructured Thomas's data to facilitate a multilevel analysis with three levels: student, teaching group and institution. This is now the accepted way of handling hierarchically structured data, particularly in the study of school effectiveness. The contrast with Thomas is the different methodological orientation, but most of the conclusions on differences between institutional types are comparable to those in that earlier work. The paper will report on some important effects of subject choice upon differential cost effectiveness.

### Fildes, R.

PD 1995. TI The Accuracy of Extrapolative Forecasting Methods: Additional Empirical Evidence. AU Fildes, R.; Hibon, M.; Makridakis, S.; Meade, N. AA Fildes: Lancaster University. Hibon and Makridakis: INSEAD. Meade: Imperial College. SR INSEAD, Working Papers: 95/04/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 12. PR not available. JE C22, C53. KW Time Series. ARMA. Exponential Smoothing. M-Competition. Robust-Trend.

AB Replication is an important aspect of hard sciences in developing an objective knowledge base that the great majority of scientists can accept. In social sciences, however, replication has proved problematic. One of the exceptions has been the M-Competition whose calculations and conclusions have been replicated by many researchers. In order to extend the range under which extrapolative methods have been compared, this study examines a unique set of 263 series. Unlike the M-Competition data, they come from a single source containing series of similar characteristics (the same calendar, no seasonality, little randomness, and a downward sloping trend). The study shows that the conclusions of the M-Competition are still valid while at the same time it is found that Robust-Trend, a new method not used in the M-Competition, outperforms all other methods. In addition, the relative performance of exponential smoothing is shown to depend on the ways its parameters are optimized. The implications of these conclusions are discussed.

### Fischer, Stanley

PD March 1995. TI Modern Approaches to Central Banking. AA International Monetary Fund and National Bureau of Economic Research. SR National Bureau of Economic Research, Working Paper: 5064; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 54. PR \$5.00. JE E58, E42, E61. KW Principal-Agent. Central Bank Independence. Inflation.

AB Modern theory has delivered both the conservative central banker and the principal-agent approached as rationales for the independence of the central bank. The principal-agent approach directs attention to the importance of both clearly

defining the goals of the central bank and its command in order to meet the targets assigned to it. The empirical evidence shows not only that greater independence is associated with lower inflation, but also that the central bank's rights not to finance the government and to set interest rates independently increase its effectiveness. The role of inflation targeting and the distinction between price level and inflation targeting are also analyzed.

#### Fisher, P.G

PD not available. TI An Empirical Analysis of M4 in the United Kingdom. AU Fisher, P.G.; Vega, Juan Luis. AA Fisher: Bank of England. Vega: Banco de Espana. SR Banco de Espana Documento de Trabajo: 9402; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. PG 61. PR not available. JE E21, E41, E51. KW Money Supply. M4. Money Demand. Interest Rates. Consumption.

AB This paper presents an econometric analysis of M4 balances based on a split between the personal and corporate sectors. For the personal sector we find that simultaneous estimation of the demand for money and a consumption function yields encouraging results. The dynamic interaction of money and consumption may have an important role to play in explaining the recent behavior of both variables. Modelling the corporate sector's money holdings is more problematic. The endogeneity of interest rates cannot be ignored and corporate behavior is more likely to resemble the portfolio allocation than a traditional demand for money approach. Nevertheless, a relatively simple model can be estimated for corporate sector M4, which offers a starting point for future research.

#### Fishman, Arthur

TI The Frequency and Pricing of Product Innovations. AU Rob, Rafael; Fishman, Arthur.

#### Flam, Harry

TI Enlargement of the European Union: The Economic Consequences for the Scandinavian Countries. AU Baldwin, Richard E.; Flam, Harry.

#### Flandreau, Marc

TI The Geography of the Gold Standard. AU Eichengreen, Barry; Flandreau, Marc.

#### Forbes, Catherine Scipione

PD September 1995. TI A Small Sample Variable Selection Procedure. AU Forbes, Catherine Scipione; King, Maxwell L.; Morgan, Alan. AA Monash University. SR Monash University, Department of Econometrics Working Paper: 15/95; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. PG 24. PR no charge. JE C15, C20, C52. KW F-Statistic. Information Criteria. Model Selection. Monte Carlo Method. Penalty Function.

AB This paper presents an information criteria based model selection procedure (called FIC) for choosing the variables to be used in a linear regression. The penalty function is based on sums of critical values from particular F-distributions which are related to the small sample probabilities of incorrectly including additional regressors. Results from a Monte Carlo simulation study demonstrate that the performance of this new procedure is competitive with other asymptotically motivated

procedures, while providing the practitioner with controls over the desired small sample probabilities of correct selection. An alternative, somewhat simpler selection criterion based on an asymptotic distribution is presented and compared to the finite sample criterion. Conditions for strong consistency of this variable selection procedure based on an approximate penalty function are presented.

#### Frank, Jeff

TI Seniority, Earnings and Unions. AU Booth, Alison L.; Frank, Jeff.

#### Franses, Philip Hans

TI Multiple Unit Roots in Periodic Autoregression. AU Boswijk, Peter; Franses, Philip Hans; Haldrup, Niels.

#### Frey, Ruediger

PD February 1995. TI A Systematic Approach to Pricing and Hedging of International Derivations with Interest Rate Risk. AU Frey, Ruediger; Sommer, Daniel. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/306; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 29. PR no charge. JE G12, G13, G15. KW Arbitrage. Interest Rate Risk. Exchange Rate Risk. Option Pricing. Hedging.

AB The paper deals with the valuation and hedging of non-path-dependent European options on one or several underlyings in a model of an international economy which allows for both interest rate and exchange rate risk. Using martingale theory we provide a unified and easily applicable approach to pricing and hedging Black-Scholes type options on stocks, bonds, forwards, futures, exchange rates and indices. We also cover the pricing and hedging of options to exchange two Black-Scholes- type options for one another. The contingent claims may pay off in arbitrary currencies.

PD March 1995. TI Market Volatility and Feedback Effects from Dynamic Hedging. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/310; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 31. PR no charge. JE G13, D81. KW Black-Scholes. Dynamic Hedging. Volatility. Option Pricing. Feedback Effects.

AB This paper analyses in what way the demand generated by dynamic hedging strategies affects the equilibrium prices of the underlying asset. To this end we first construct an economy in which prices are given by the classical Black-Scholes model. Then we introduce into this model additional traders who are implementing dynamic trading strategies as they are, for instance, prescribed by Black-Scholes theory. We derive an explicit expression for the transformation of market volatility under the impact of hedging. It turns out that market volatility increases and becomes price-dependent. The strength of the effects depend not only on the market share of portfolio insurance but also crucially on the heterogeneity of insured payoffs. Moreover we discuss in what sense hedging strategies calculated under the assumption of constant volatility are still appropriate if the feedback effect of their implementation on prices is taken into account.

**Fry, Tim R.L.**

**TI** Combining Choice Set Partition Tests for the Independence of Irrelevant Alternatives Properties: Size Properties in the Four Alternatives Setting. **AU** Brooks, Robert D.; Fry, Tim R.L.; Harris, Mark N.

**TI** The Size and Power Properties of Combining Choice Set Partition Tests for the IIA Property in the Logit Model. **AU** Brooks, Robert D.; Fry, Tim R.L.; Harris, Mark N.

**Fujita, Masahisa**

**PD** September 1994. **TI** Firm Location and Job Creation in Cities. **AU** Fujita, Masahisa; Thisse, Jacques-Francois; Zenou, Yves. **AA** Fujita: University of Pennsylvania. Thisse: Universite de Paris I- Sorbonne. Zenou: Universite de Paris 2-Assas. **SR** Centre for Economic Policy Research, Discussion Paper: 1011; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 21. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** J61, R14, R32. **KW** Firm Location. Job Creation. Labor Migration. Urban Configurations.

**AB** Cities are often viewed as places fostering employment. It is shown that the choice of a particular location within a city is a key factor for the creation of jobs by a new existing firm. This question is addressed in the context of a standard urban model in which existing firms are established at the city center and where workers compete in both the land and labor markets. The new firms is supposed to anticipate the impact of its location and wage decision on those two markets. Different urban configurations then emerge depending on the competitiveness of the existing firms in the labor market. More jobs are created as the firm sets up further away from the city center.

**Fulghieri, Paolo**

**TI** Why Include Warrants in New Equity Issues? A Theory of Unit IPOs. **AU** Chemmanur, Thomas J.; Fulghieri, Paolo.

**Funk, Peter**

**PD** January 1996. **TI** Endogenous Growth, Temporary Equilibrium and the Direction of Change. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/506; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 34. **PR** no charge. **JE** D51, D63, O12, O31, O33. **KW** Endogenous Growth. Direction of Change. Temporary Equilibrium. Efficient Development.

**AB** This article studies the long-run direction of technological change in an endogenous growth model. Development is modeled as a sequence of temporary equilibria in an overlapping generations framework. We introduce a concept of "long-run efficient development" which excludes persistent inefficiencies. The concept is much weaker than short-run or long-run Pareto-efficiency and does not depend on our particular model. The main theorem of the article gives conditions on agents' expectations and preferences and on the evolution of innovation possibilities under which equilibrium development, guided by current prices and profit expectations, is long-run efficient.

**PD** January 1996. **TI** On the Dynamic Efficiency of the Market System. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/507;

Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 28. **PR** no charge. **JE** D51, D63, O12, O31, O33. **KW** Endogenous Growth. Direction of Change. Dynamic Efficiency.

**AB** We introduce a framework of development in which the direction of change is determined endogenously. Which new products, which new qualities and which new techniques are introduced in the course of development is determined by the profitability of different potential innovations. We define a concept of long-run efficiency of development which formalizes a widespread notion of "dynamic efficiency". The concept merely excludes persistent inefficiencies. We finally give conditions that guarantee long-run efficiency of laissez-faire development. This formalizes a popular claim about the dynamic efficiency of the market system, and, at the same time, makes more precise the limits to the claim.

**PD** January 1996. **TI** Satiation and Underdevelopment. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/508; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 24. **PR** no charge. **JE** F11, O12, O3. **KW** Endogenous Growth. Induced Innovations. Direction of Change. Persistent Poverty. Growth and Inequality.

**AB** In this article we show how absolute poverty and per capita growth can be sustained simultaneously in a fully integrated world economy even in the absence of population growth. In contrast to the literature, we use a model of endogenously sustained growth in which not only the intensity of progress is determined endogenously, but also the direction of change. The essential assumptions driving the results are that once a person has satisfied his basic needs, he prefers high-quality commodities to low-quality commodities and that innovation-possibilities within high-quality sectors are not unskilled-labor-using.

**PD** January 1996. **TI** Dynamic Gains from Trade. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/509; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 22. **PR** no charge. **JE** D52, F11, O12, O31. **KW** Endogenous Growth. Gains from Trade. Underdevelopment.

**AB** This article examines the validity of a gains from trade proposition in a world in which the direction of technological change is determined endogenously. We first give an extreme example in which a part of the world that would smoothly develop under autarchy forever remains underdeveloped under free trade. An assumption is then introduced, which excludes the example and guarantees that development under free trade dominates development under autarchy in the long-run. The assumption is closely related to the assumption of irreducible markets in Mackenzie [1959]. It requires the existence of a "closed scarcity chain" connecting tastes and endowments of all types of consumers. The results complement the classical gains from trade proposition that assumes the state of technological knowledge to be given.

**PD** January 1996. **TI** Economic Possibilities for the Grandchildren of John Maynard Keynes. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/512; Sonderforschungsbereich 303 an der

Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 30. PR no charge. JE D63, D62, O12, O33. KW Endogenous Growth. Sources of Sustained Growth. Direction of Growth. Relative Needs.

AB This paper explores the impact of insatiable need on the sustainability and the direction of technological change and economic growth. In a simple framework it is shown that growth can only be sustained if either the opportunity costs of research are small at low levels of research or if some needs are insatiable. The first source of sustained growth (low opportunity cost of research) also enhances an efficient spread of growth over different technologies and commodities, while the second (insatiable needs) typically induces the "wrong kind" of growth. In connection with Keynes' essay "On the Economic Possibilities of our Grandchildren" (1931), we consider relative needs as the main source of insatiability of needs.

### Gaab, Werner

PD May 1995. TI Financial Innovation, Monetary Aggregates and Monetary Policy in the UK and Germany. AU Gaab, Werner; Mullineux, Andy. AA Gaab: University of Essen. Mullineux: University of Birmingham. SR University of Birmingham, Department of Economics, Discussion Paper: 95/17; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. PG 38. PR 2 pounds. JE E42, E52. KW Monetary Aggregates. Financial Innovation. UK. Germany.

AB This paper first examines the role of monetary aggregates in monetary policy formulation in the UK and Germany over the past decade. It then compares the usefulness of simple-sum and Divisia broad money aggregates (indices) as indicators of economic conditions (output and prices/inflation) in each country using cointegration and causality analysis and error-correction modeling. In Germany, simple-sum M# marginally outperforms its Divisia counterpart, whilst in the UK Divisia M4 significantly outperforms its simple-sum counterpart. This is attributed to the hitherto more rapid financial innovation in the UK and to measurement problems inherent in calculating Divisia monetary indices. It is recommended that attempts be made to overcome the latter and that more refined Divisia indices should be monitored along with their simple-sum counterparts so that divergences, which often appear to contain useful information, can be subjected to scrutiny.

### Gaba, Anil

PD February 1996. TI Individual Differences in Subjective Risk Thresholds. AU Gaba, Anil; Viscusi, W. Kip. AA Gaba: INSEAD. Viscusi: Duke University. SR INSEAD, Working Papers: 96/13/EPS/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 26. PR not available. JE C25, D42, D81, J28. KW Risk Perceptions. Risk Thresholds. Risk Premiums. Dichotomous Variables.

AB Subjective risk perceptions are often encoded as responses to 0-1 questions in surveys or other qualitative risk scales. However, reference points for assessing an activity as risky are confounded by various characteristics of the respondents. This paper uses a sample of workers for whom quantitative risk assessments as well as dichotomous risk perception responses are available. It is shown that, given a quantitative risk measure, the thresholds for assessing an

activity as risky vary systematically, particularly by education. The differences in such thresholds across worker groups are estimated. The resulting implications of using qualitative risk variables for assessing wage-risk tradeoffs are estimated, yielding results which are also relevant for many other areas involving similar qualitative variables.

### Gabel, H.L

PD December 1994. TI Environmental Audits and Incentive Compensation. AU Gabel, H.L.; Sinclair-Desgagne, B. AA Gabel: INSEAD. Sinclair-Desgagne: INSEAD and CIRANO. SR INSEAD, Working Papers: 95/25/MER; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 16. PR not available. JE J31, J33. KW Environmental Audits. Wages. Monitoring.

AB This paper studies the link between environmental audits and employee compensation. The context is a one-period principal-agent relationship where the risk-averse agent must allocate effort between financial and environmental tasks. The former are routinely monitored while the latter are audited (at some cost) only under specific circumstances. We find that the optimal wages have a lower mean and a greater variance when there is an environmental audit than when there is not. This puts more risk on the agent, so the expected wage ex ante must be higher than in a situation with no environmental audits. We also find that the agent might just split his effort between environmental and financial tasks, provided the information gathered using environmental audits is about as accurate as that coming from financial monitoring.

TI Optimising Environmental Product Life Cycles: A Case Study of the European Pulp and Paper Sector. AU Weaver, P.M.; Gabel, H.L.; Bloemhof-Ruwaard, J.M.; Van Wassenhove, Luk N.

TI An Environmental Life Cycle Optimization Model for the European Pulp and Paper Industry. AU Bloemhof-Ruwaard, J.M.; Van Wassenhove, Luk N.; Gabel, H.L.; Weaver, P.M.

TI An Environmental Life Cycle Optimization Model for the European Pulp and Paper Industry. AU Bloemhof-Ruwaard, J.M.; Van Wassenhove, Luk N.; Gabel, H.L.; Weaver, P.M.

### Galbis, Vincente

PD December 1995. TI Financial Sector Reforms in Eight Countries: Issues and Results. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/141; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 46. PR not available. JE E42, E52, G18, O11. KW Developing Markets. Privatization. Economic Reform.

AB This paper examines financial sector reforms in eight developing countries--Argentina, Bulgaria, Ecuador, Egypt, India, Kenya, Tanzania, and Uganda--and derives general lessons from their experience. The paper reviews the initial situation of these countries; describes the financial sector (and related) reforms carried out, including sequencing issues, and points out the unresolved questions; and examines the effects of reforms on monetary control and financial development, investment and growth and the efficiency of financial intermediation. The main recommendations are the need to persevere with macroeconomic stabilization through indirect

monetary policy instruments, and the need to substantially strengthen prudential regulation and supervision and restructure and privatize or liquidate ailing financial institutions.

#### Galetovic, Alexander

PD March 1994. TI Financial Intermediation, Resource Allocation, and Long-Run Growth. AA Princeton University and Centro de Economia Aplicada. SR Princeton University, Woodrow Wilson School Discussion Paper in Economics: 170; Woodrow Wilson School, Robertson Hall, Princeton University, Princeton, NJ 08544. PG 30. PR no charge. JE G10, G20, E44, O16, O40. KW Financial Intermediation. Financial Development Path. Frictions. Intangible Assets. Long-Run Growth.

AB I present an endogenous growth model to study the role that financial intermediaries play in the mechanics of long-run growth. Under the premise that frictions in credit markets are important I show that: (a) financial innovations that improve the static efficiency of the economy or foster the accumulation of physical capital may retard long-run growth; (b) the allocation of short-term loans may be as important for growth as the allocation of long-term loans; (c) low-quality financial services or sufficiently large intermediation costs can bring growth to a halt. I conclude that while finance is not an engine of growth, it clearly plays more than a passive role in the mechanics of growth.

#### Gali, Jordi

TI Sources of Real Exchange Rate Fluctuations: How Important are Nominal Shocks? AU Clarida, Richard; Gali, Jordi.

#### Galor, Oded

PD June 1994. TI Human Capital Distribution, Technological Progress, and Economic Growth. AU Galor, Oded; Tsiddon, Daniel. AA Galor: Brown University. Tsiddon: The Hebrew University of Jerusalem. SR Centre for Economic Policy Research, Discussion Paper: 971; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 43. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE D31, O41. KW Income Distribution. Human Capital. Growth. Overlapping Generations. Kuznets Hypothesis.

AB This paper analyzes the interaction between the distribution of human capital, technological progress, and economic growth. It demonstrates the significant role of the distribution of human capital in the process of economic development. The evolutionary pattern of the human capital distribution, the income distribution and economic growth are determined by the interplay between a local home environment externality and a global technological externality. In periods during which the home environment externality is the dominating factor, the distribution of human capital becomes polarized, whereas in periods during which the global technological externality dominates, convergence ultimately takes place. The study suggests that a poor uneducated economy which values equity as well as prosperity may confront a trade-off between equity in the short run and equity and prosperity in the long run. An economy that prematurely implements a policy designed to enhance equality may be trapped at a low output equilibrium.

#### Galunic, D.C

PD August 1995. TI The Evolution of Intracorporate Domains: Divisional Charter Losses in High Technology, Multidivisional Corporations. AU Galunic, D.C.; Eisenhardt, K.M. AA Galunic: INSEAD. Eisenhardt: Stanford University. SR INSEAD, Working Papers: 95/75/OB/SM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 55. PR not available. JE D23, L22. KW Evolution. Strategic Process. Multidivisional Firm. Organizational Structure. Organizational Change.

AB Modern corporations have become synonymous with the multidivisional form of organization. Various interdependent divisions are "chartered" to look after one or more business areas, in effect defining the "turf" of the division and its purpose within the corporation, and collectively defining the corporate domain. However, once created, these divisional charters should not be regarded as rigid; they are susceptible to change. Particularly in fast-paced environments, such as in high technology industries, divisional charters are liable to change as divisions add or subtract businesses to their charter responsibilities. These charter changes are seen as an adaptive device for large, multidivisional corporations in fast-paced environments. This paper presents a process model of how divisions change their domains in hypercompetitive contexts, focusing on the specific question of how divisions lose all or portions of their business charters. The paper is based on a larger inductive study of charter changes in 10 divisions, both domestic and foreign, of a large, multinational, high technology corporation. Data were collected over an 18 month period and included formal interviews, questionnaires, company documents, group interviews, media publications and direct observations of strategy formation sessions. Over 80 informants were interviewed across several managerial levels. Our data revealed three distinct patterns and logics of charter loss depending upon what phase of core business development a division found itself: (1) Divisions starting up new core businesses lost these charters because of a combination of their failure in the new area and competition with other divisions in the company -- the process revealed a competitive market for new charters; (2) Divisions rapidly growing new core businesses lost peripheral business areas in order to focus on the core business -- the process emphasized a focus logic for charter change; finally (3) Divisions with mature charter areas were found to shed their core business areas because of an emerging misfit between their skills and culture and the nature of competition in the industry -- the process emphasized the emerging nature of corporate misalignment and the abrupt charter changes that can follow. This paper contributes to organizational theory by exploring the evolution of large, diversified corporations, focusing on the organizational responses to fast-moving, competitive environments. It also contributes to strategy by revealing a "Re-combinant" multidivisional organizational form, by which timely charter changes can be used by large corporations to keep pace in these turbulent contexts.

TI Consequences of Public Scrutiny for Leaders and Their Organizations. AU Sutton, R.I.; Galunic, D.C.

#### Gatignon, Hubert

TI Order-of-Entry and the Diffusion of Trials in a New Category. AU Parker, Philip M.; Gatignon, Hubert.

TI Development Mode: A Transaction Cost

Conceptualization. AU Robertson, Thomas S.; Gatignon, Hubert.

TI Order of Entry as a Moderator of the Effect of the Marketing Mix on Market Share. AU Bowman, D.; Gatignon, Hubert.

PD March 1995. TI Explaining Cross-Country Differences in Price and Distribution Effectiveness. AU Gatignon, Hubert; Vanden Abeele, P. AA Gatignon: INSEAD. Vanden Abeele: Katholieke Universiteit Leuven. SR INSEAD, Working Papers: 95/31/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 39. PR not available. JE F23, M31. KW Marketing. Standardization. Economic Development. International Trade.

AB See the abstract for Gatignon and Vanden Abeele (1995), INSEAD Working Papers, 95/40/MKT.

PD March 1995. TI Explaining Cross-Country Differences in Price and Distribution Effectiveness. AU Gatignon, Hubert; Vanden Abeele, P. AA Gatignon: INSEAD. Vanden Abeele: Katholieke Universiteit Leuven, Belgium. SR INSEAD, Working Papers: 95/40/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 43. PR not available. JE F23, M31. KW Marketing. Standardization. Economic Development. International Trade.

AB The objective of this research is to test whether, and to explain why, the effectiveness of marketing instruments such as price and distribution coverage varies across countries. The issue is important when marketing a product in multiple countries. Despite much normative discussion about the globalization of markets and the desirability of international marketing program standardization, little analytical (compared to descriptive) empirical research to date addresses the issue. The case for standardization of allocation of marketing budgets to marketing mix variables rests on the validity of the assertion that variations in marketing mix effectiveness across countries are rather small. In this research, we provide empirical evidence about the degree of similarity in market response function coefficients among European countries in one established consumer convenience good market, and we analyze potential reasons for such differences. Notably, we find indication of substantial variations in marketing mix effectiveness in a manner related to level of economic maturity. In trading areas including countries of different economic maturity levels, this suggests that the marketing budget should be allocated differently internationally. This finding has direct implications about the likely impact of the European Union on Pan-European marketing standardization.

PD May 1995. TI Strategic Orientation of the Firm and New Product Performance. AU Gatignon, Hubert; Xuereb, J.M. AA Gatignon: INSEAD. Xuereb: ESSEC. SR INSEAD, Working Papers: 95/42/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 43. PR not available. JE D21, L11, L15. KW Strategic Orientation. Product Innovation. Technology. Competition.

AB See the abstract for Gatignon and Xuereb (1995), INSEAD Working Papers, 95/60/MKT.

PD June 1995. TI Incumbent Defense Strategies Against New Product Entry. AU Gatignon, Hubert; Robertson, Thomas S.; Fein, Adam J. AA Gatignon: INSEAD.

Robertson: London Business School. Fein: University of Pennsylvania. SR INSEAD, Working Papers: 95/49/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 40. PR not available. JE L11, L72. KW Market Entrant. Incumbent Firm. Defense Strategies.

AB The objective of this study is to estimate the effectiveness of different defense strategies when faced with a new product introduction by a competitor. Using a sample of incumbents across a wide range of industries, we find that faster reactions to the new entrant have a positive impact on the perceived success of the defense strategy. However, the greater the breadth of reaction (number of marketing mix instruments used), the less successful the defense. The ability of an incumbent to maintain its market position is also significantly affected by industry characteristics and the degree of competitive threat posed by the entrant.

PD June 1995. TI Strategic Orientation of the Firm and New Product Performance. AU Gatignon, Hubert.; Xuereb, J.M. AA Gatignon: INSEAD. Xuereb: ESSEC. SR INSEAD, Working Papers: 95/60/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 43. PR not available. JE D21, L11, L15. KW Strategic Orientation. Product Innovation. Technology. Competition.

AB This research seeks to understand which of three different strategic orientations of the firm (customer, competitive, and technological orientations) is more appropriate, when, and why, in the context of developing product innovations. We propose a structural model of the impact of the strategic orientation of the firm on the performance of a new product. This impact is hypothesized to occur as a chain of events. Strategic orientation is viewed first as an antecedent of the characteristics of the innovation marketed by the firm. The subsequent market performance of the innovation is hypothesized to be a function of both the innovation's characteristics and the firm's strategic orientation. The ability of the firm to take advantage of its orientation to market the innovation successfully is also hypothesized to be moderated by the firm's environment. The results provide evidence for best practices as follows: (1) A firm wishing to develop an innovation superior to the competition must have a strong technological orientation. (2) A competitive orientation in high growth markets is useful because it enables firms to develop innovations with lower costs, a critical element of success. (3) Firms should be consumer oriented and technology oriented in markets where demand is relatively uncertain. These orientations together lead to products which perform better, and the firm will be able to market innovations better, thereby achieving a superior level of performance. (4) A competitive orientation is useful to market innovations when demand is not too uncertain but should be de-emphasized in highly uncertain markets. In short, these results suggest that the appropriateness of a given strategic orientation, even a customer orientation, is not unconditional.

### Gatsios, Konstantine

TI Trade with Central and Eastern Europe: The Case of Greece. AU Dimelis, Sophia; Gatsios, Konstantine.

### Geroski, Paul

PD October 1995. TI Innovations, Patents and Cash Flow. AU Geroski, Paul; Van Reenen, John; Wallens, Chris. AA Geroski and Wallens: London Business School. Van

Reenen: University College London and Institute for Fiscal Studies. SR University College London Discussion Paper: 95/18; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG 31. PR 3 Pounds; checks payable to Department of Economics, University College London. JE O31, O33, H32. KW Innovation. Patents. Panel Data.

AB In this paper, we estimate a dynamically recursive model of the relationship between innovations, patents and cash flow. Our results suggest that (i) lagged patents are significant predictors of current innovation, but lagged innovations do not affect the conditional expectation of current patents; (ii) patents are influenced primarily by advances in the science base as measured by R&D intensity and spillovers, while innovations are more sensitive to cash flow or demand shocks; (iii) innovations have a greater impact on cash flow than patents; and, finally, (iv) both patents and innovations show strong history dependence. We use our model to simulate the effects of spending 500 million pounds on any one of three different types of government policies (non-discretionary R&D subsidies, cuts in corporate tax and stimulation of macroeconomic demand growth) on the innovative activities of firms. These simulations suggest that the role for state intervention in promoting technological advance is decidedly limited.

#### Ghosh, Atish R.

PD November 1995. TI Does the Nominal Exchange Rate Regime Matter? AU Ghosh, Atish R.; Gulde, Anne-Marie; Ostry, Jonathan D.; Wolf, Holger C. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/121; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 26. PR not available. JE F33, F43, E31. KW Foreign Exchange. Regime. Fixed Rates.

AB The effect of the exchange rate regime on inflation and growth is examined. The 30-year data set includes over 100 countries and nine regime types. Pegged regimes are associated with lower inflation than intermediate or flexible regimes. This anti-inflationary benefit reflects lower money supply growth (a discipline effect) and higher money demand growth (a credibility effect). Output growth does not vary significantly across regimes: Countries with pegged regimes invest more and are more open to international trade than those with flexible rates, but they experience lower residual productivity growth. Output and employment are more variable under pegged rates than under flexible ones.

#### Ghura, Dhaneshwar

PD December 1995. TI Growth in Sub-Saharan Africa. AU Ghura, Dhaneshwar; Hadjimichael, Michael T. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/136; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 21. PR not available. JE O11, O55, C23. KW Africa. Growth. Government Size. Economic Reform.

AB The paper investigates empirically the determinants of economic growth for a large sample of sub-Saharan African countries during 1981-92. The results indicate that (i) an increase in private investments has a relatively large positive impact on per capita growth; (ii) growth is stimulated by public policies that lower the budget deficit in relation to GDP (without reducing government investment), reduce the rate of inflation, maintain external competitiveness, promote structural

reforms, encourage human capital development, and slow population growth; and (iii) convergence of per capita income occurs after controlling for human capital development and public policies.

#### Giddy, I.

TI European Financial Market Integration: The Problem of Clearance and Settlements. AU Walter, I.; Saunders, A.; Giddy, I.

PD October 1995. TI Barriers to European Financial Market Integration: Clearance and Settlement of Equities. AU Giddy, I.; Saunders, A.; Walter, I. AA Giddy and Saunders: New York University. Walter: INSEAD. SR INSEAD, Working Papers: 95/87/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 55. PR not available. JE F36, G15. KW Market Efficiency. European Financial Market. Economic Integration.

AB A prerequisite for the development of an integrated international equity market that permits investors to achieve optimum asset-allocation and corporations to tap pools of capital most efficiently is a supportive transactions infrastructure comprising the clearance, settlement, payment and custody of cross-border. This infrastructure is the "plumbing" of the market, a structure that is composed of many different parts that must operate as a seamless and integrated system in order to achieve maximum efficiency for the end-users and thus promote the ultimate objective, optimum capital allocation. Blockages and discontinuities in the utilities that comprise the transactions infrastructure make themselves felt in the form of increased transaction costs. At present, Europe, notably the EU, falls far short of having a functional transactions infrastructure for equity securities, and this will remain an important shortcoming as other dimensions of financial integration proceed. This paper enumerates these shortcomings, identifies benchmarks for their alleviation, and evaluates the pros and cons of specific models for a high-performance European approach to this issue.

#### Gilli, Mario

PD March 1996. TI Learning Standards of Social Behaviour in a Stationary Society. AA University of Cambridge and Universita L. Bocconi. SR University of Cambridge, Department of Applied Economics, Amalgamated Series Working Paper: 9610; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 40. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE C70, D83. KW Learning Processes. Rational Learning Models. Bayesian Rational Players.

AB This paper proposes a general model of repeated strategic interaction with possibly private information, which is particularly suitable for studying learning processes. In this context, the author analyzes the asymptotic behavior of Bayesian rational players facing strategic uncertainty, showing the need for stationarity assumptions so that the individual inference problem could become solvable within the structure of rational learning models. The author then proves convergence to Conjectural Equilibria of the component game. The emphasis of the paper is thus on how to model rational learning in game theory and on the notion of equilibrium for imperfect monitoring games.



**Gilo, David**

PD November 1995. TI Partial Ownership as a Strategic Variable to Facilitate Tacit Collusion. AA Harvard University. SR Harvard University, John F. Kennedy School of Government Discussion Paper: n/a; John F. Kennedy School of Government, Harvard University, 79 John F. Kennedy Street, Cambridge, MA 02138. PG 45. PR no charge. JE D43, L13, L21, C73. KW Partial Ownership. Tacit Collusion. Controlling Shareholder. Repeated Interaction. Cost Asymmetries.

AB This paper investigates the role of partial ownership of and by an oligopolist as a strategic device to facilitate tacit collusion. The paper discusses partial ownership as a decision variable in the hands of the firms, and not as an exogenous parameter, as in previous literature. Once partial ownership is acknowledged as a decision variable, it is unambiguously shown that it improves the prospects of sustaining tacit collusion. Moreover, it will be shown how a firm's controller who partially owns a competing firm can further facilitate tacit collusion by selling out part of her own firm's stock. The analysis concentrates on a Bertrand model with and without cost asymmetries. It will also be demonstrated how the qualitative results of the paper carry over to the Cournot framework as well.

**Giulietti, Monica**

PD November 1995. TI Multiproduct Firms' Pricing Behavior in the Italian Grocery Trade. AA University of Exeter. SR University of Exeter, Department of Economics Discussion Paper: 95/09; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 36. PR no charge. JE C33, L81, L13. KW Multiproduct Firm Pricing. Price Competition. Italian Grocery Trade. Panel Data Analysis.

AB This paper investigates the determinants of price dispersion between staple and non-staple goods in grocery retailing, as the result of pricing decisions of multiproduct firms. Contradictory theoretical predictions about the nature of supermarkets' pricing behavior are compared by highlighting the main underlying behavioral assumptions. These theoretical predictions are tested empirically using disaggregated data from the Italian grocery trade. The empirical results provide evidence for the existence, in all types of retail organization, of the form of price discrimination suggested in Bliss (1984). The results are consistent with discrimination due to the exploitation of customers' switching costs.

**Gjerstad, Steven**

PD November 1995. TI Price Formation in Double Auctions. AU Gjerstad, Steven; Dickhaut, John. AA Gjerstad: University of Arizona. Dickhaut: University of Minnesota. SR University of Minnesota, Center for Economic Research, Discussion Paper: 284; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. PG 27. PR no charge. JE C78, D41, D83, D84, L13. KW Competitive Equilibrium. Learning. Private Information. Price Formation. Double Auctions.

AB Markets have the capacity to resolve complex coordination problems. Hayek (1945) asked how privately held market information is organized through the trading process to arrive at competitive equilibrium. We propose strategies for sellers and buyers in a double auction (DA) market that result

in transaction prices at or near competitive equilibrium in a variety of market environments. A large experimental literature documents convergence in many market environments to competitive equilibrium, but the theoretical literature treating the bargaining behavior in this institution is relatively small, and the models presented to date do not account for the many regularities observed in the data from experiments. We provide a model that accounts for several important regularities of double auction data. We model an informationally decentralized decision making procedure for sellers and buyers. Sellers form beliefs that an ask will be taken by some buyer. Similarly, buyers form beliefs that a bid will be taken by a seller. These beliefs are formed on the basis of observed market data, including frequencies of asks, bids, accepted asks, and accepted bids. Then traders choose an action that maximizes their own expected surplus. While traders in this model form beliefs about the probability that a given action they choose will result in a transaction, they have no beliefs about the types (costs or valuations) or strategies of other traders. The trading activity resulting from these beliefs is sufficient to achieve transaction prices near competitive equilibrium and complete market efficiency after several periods of trading.

**Glower, Michel**

PD March 1995. TI Selling Price and Selling Time: The Impact of Seller Motivation. AU Glower, Michel; Hendershott, Patric H.; Haurin, Donald R. AA Haurin: Ohio State University. Hendershott: Ohio State University and National Bureau of Economic Research. SR National Bureau of Economic Research, Working Paper: 5071; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 22. PR \$5.00. JE G12, R31, R21. KW Housing. Property. Efficient Markets.

AB This study considers the role that seller motivation plays in determining sales price and selling time. We find that sale prices are directly related to the estimated value of the property and to the amount of over-pricing, which is directly related to the seller's level of motivation. Further, a seller who has a planned date of move will over-price less (set lower list prices relative to market value) and sell more quickly than a seller with no definite move data. A seller who is willing to move later will over-price more and sell more slowly than a seller who wants to move sooner.

**Gonzalez-Paramo, Jose M.**

TI Does Public Spending Crowd Out Private Investment? Evidence From a Panel of 14 OECD Countries. AU Argimon, Isabel; Gonzalez-Paramo, Jose M.; Alegre, Jose M. Roldan.

**Gonzalo, Jesus**

TI Multicointegration and Present Value Relations. AU Engsted, Tom; Gonzalo, Jesus; Haldrup, Niels.

**Goodhart, Charles**

PD not available. TI Strategy and Tactics of Monetary Policy: Examples From Europe and the Antipodes. AU Goodhart, Charles; Vinals, Jose. AA Banco de Espana. SR Banco de Espana Documento de Trabajo: 9425; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. PG 67. PR not available. JE E42, E52, E58. KW Price Stability. Central

Banks, European Union.

**AB** The paper discusses the way in which the strategy and tactics of monetary policy are being articulated at present in Europe and other countries. This is done in a context where price stability has become the primary objective of monetary policy and where an increasing number of central banks are being given increasing autonomy to pursue this goal.

### Gourieroux, Christian

**PD** December 1994. **TI** A Comparison of Kernel Estimator Based Goodness of Fit Tests. **AU** Gourieroux, Christian; Tenreiro, C. **AA** Gourieroux: CREST and CEPREMAP. Tenreiro: Coimbra University. **SR** CEPREMAP Discussion Paper: 9513; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 48. **PR** 25 F.F. **JE** C14, C12. **KW** Goodness of Fit. Density Estimates. Asymptotic Power. Local Alternatives.

**AB** We consider different test statistics based on integrated quadratic forms measuring the proximity between a kernel estimator of a function and the function's null-hypothesis value, or between the kernel estimator and its expected value computed under the null. We compare their asymptotic local power functions, and discuss the possibility to obtain unbiased tests. Finally we explain how to obtain kernel-based goodness of fit tests, which are asymptotically locally uniformly most powerful unbiased (LUMPU) for testing the null against a parametric hypothesis including the null.

### Gowers, Robin

**PD** September 1994. **TI** The Origins and Early Impact of the Minimum Wage in Agriculture. **AU** Gowers, Robin; Hatton, Timothy J. **AA** University of Essex. **SR** Centre for Economic Policy Research, Discussion Paper: 1021; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 21. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** J31, J43, N34, N44. **KW** Minimum Wage. Agriculture.

**AB** This paper examines the effects on wages and employment of the minimum wage in agriculture in the United Kingdom during the interwar period. We find that the impact of regulation was to raise the wage for agricultural laborers by 13 percent when it was (re)introduced in 1924, by 15 percent in the late 1920s, and by more than 20 percent in the 1930s. The effect on farm employment was to reduce it by about 54,000 (6.5 percent) in 1929 up to a peak of 97,000 (13.3 percent) in 1937. The minimum wage lifted many families of farm laborers who remained employed out of poverty, but it significantly lowered the incomes of farmers, particularly during the 1930s.

### Grada, Cormac O.

**TI** Irish Economic Growth, 1945-88. **AU** O'Rourke, Kevin; Grada, Cormac O.

### Granger, Clive W. J.

**PD** February 1996. **TI** Separation in Cointegrated Systems, Long Memory Components and Common Stochastic Trends. **AU** Granger, Clive W. J.; Haldrup, Niels. **AA** Granger: University of California, San Diego. Haldrup: University of Aarhus. **SR** University of Aarhus, Department of Economics, Memo: 1996/3; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK/8000 Aarhus C, DENMARK. **PG** 16. **PR** no charge.

**JE** C32, C40. **KW** Separation. Sub-System Cointegration. Persistent-Transitory Decomposition. Non-Linear Error Correction.

**AB** The notion of separation in cointegrated systems helps to identify possible sub-system structures that may reduce the complexity of larger systems by yielding a more parsimonious representation of the time series. In this paper we demonstrate that although the subsystem cointegration analysis in such systems can be conducted in case of both completely and partially separated systems, the dual approach (i.e., calculation of the common stochastic trends) may turn out to yield properties of the trends that differ depending upon the type of separation under consideration. In particular, we demonstrate how persistent-transitory decompositions and long- and short-memory factorizations of a multivariate time series will be affected when considering different types of separation. Generalizations to non-linear error correction models are also discussed.

### Green, David A.

**PD** May 1995. **TI** Immigrant Occupational Attainment: Assimilation and Mobility Over Time. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 95/15; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 70. **PR** 20 cents per page Canadian to other than educational institutions. **JE** J61, J62, F22. **KW** Immigration. Occupations. Labor Force Mobility.

**AB** Immigration may contribute to a host economy, to the extent that immigrant skills are complementary to those of the native born, by reducing wage variability and aiding in growth. Further, if immigrants are particularly mobile across occupations, then they may improve the efficiency of the economy in responding to future demand and technology shocks even if no new immigration occurs. This study provides evidence on these potential contributions by comparing immigrant and native born male occupational distributions in Canada in 1981, 1986 and 1991. The paper centers around three main questions. First, do immigrants differ from the native born in their occupational distribution just after arrival and in subsequent years, and if so, how? Second, are immigrants more occupationally mobile than the native born over time, in the sense of having greater changes in their occupational distribution? Third, how do immigrant occupational choices and mobility relate to observable characteristics that are used in the immigrant selection process? Results indicate that immigrants are in more skilled occupations relative to the native born, as measured by their intentions at time of landing, but that this difference is declining across successive cohorts. Immigrants are much more occupationally mobile than the native born even after substantial time in Canada, indicating that immigration may be a valuable resource in contributing to a more flexible labor force. Immigrants who are not assessed on their skills when they enter or are not fluent at time of arrival tend to be in less skilled occupations and to be less occupationally mobile. Thus, there is a significant role for immigration policy to shape the economic benefits from immigration.

**TI** Differences in Earnings and Wage Distributions Between Canada and the U.S.: An Application of a Semi-Parametric Estimator of Distribution Functions with Covariates. **AU** Donald, Stephen G.; Green, David A.; Paarsch, Harry J.

**PD** November 1995. **TI** Unemployment Insurance and Job Durations: Seasonal and Non-Seasonal Jobs. **AU** Green, David A.; Sargent, Timothy C. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 95/47; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 55. **PR** 20 cents per page Canadian to other than educational institutions. **JE** J65, J64, C41. **KW** Job Duration. Unemployment Insurance. Hazard Models.

**AB** We use regional and individual variation in unemployment insurance (UI) parameters to estimate the impact of UI incentives on job durations. In doing so, we distinguish between seasonal and non-seasonal jobs. This is done in part because of differing theoretical predictions for UI incentive effects in the two types of jobs and in part because one may want to design different UI related policies for agents for whom the timing of layoffs is known in advance. Further, seasonal workers and firms interact with the UI system repeatedly and thus may be most capable of adjusting their behavior to it. We find evidence of substantial tailoring of job durations to UI incentives in seasonal but not non-seasonal jobs. Even for seasonal jobs, we find that adjusting the parameters of the existing UI system has only small impacts on average job duration apart from jobs in high unemployment regions. Lengthening the UI entrance requirement leads to some jobs being extended but also results in creation of more very short jobs. Thus, policies that adjust parameters of the current UI system without affecting the proportion of jobs that are seasonal are unlikely to have substantial effects in altering average job lengths and may lead to the creation of more short, unstable jobs.

#### Griffith, Rachel

**TI** Market Share, Market Value and Innovation in a Panel of British Manufacturing Firms. **AU** Blundell, Richard; Griffith, Rachel; Van Reenen, John.

#### Griliches, Zvi

**PD** March 1995. **TI** Production Functions: The Search for Identification. **AU** Griliches, Zvi; Mairesse, Jacques. **AA** Griliches: Harvard University and National Bureau of Economic Research. Mairesse: INSEE, CREST and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5067; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 24. **PR** \$5.00. **JE** C23, D24. **KW** Production Function. Econometric Methodology. Simultaneous Equations.

**AB** Some aspects of the econometric estimation of production functions are discussed, focusing primarily on the issue of simultaneity and reviewing the stream of criticisms of Douglas's work and the response to it. We look in particular at the work that uses panel data on micro data for plants or firms and at some more recent multi-equation models. We find that researchers, in trying to evade the simultaneity problem, have shifted to the use of thinner and thinner slices of data, exacerbating thereby other problems and misspecifications. We describe the need for better data, especially on product prices at the individual observation level and on relevant cost and demand shifters, and for better behavioral theories which would encompass the large amount of heterogeneity observed at the micro level.

#### Grodal, Birgit

**TI** Profit Maximization, Relative Prices, and the Maximization of Shareholders' Real Wealth. **AU** Dierker, Egbert; Grodal, Birgit.

**TI** The Price Normalization Problem in Imperfect Competition and the Objective of the Firm. **AU** Dierker, Egbert; Grodal, Birgit.

#### Grossman, Gene M.

**PD** October 1993. **TI** Endogenous Innovation in the Theory of Growth. **AU** Grossman, Gene M.; Helpman, Elhanan. **AA** Grossman: Princeton University. Helpman: Tel Aviv University and CIAR. **SR** Princeton University, Woodrow Wilson School Discussion Paper in Economics: 165; Woodrow Wilson School, Robertson Hall, Princeton University, Princeton, NJ 08544. **PG** 36. **PR** no charge. **JE** O40, O33, E22. **KW** Endogenous Growth. Investment. Knowledge. Technological Progress.

**AB** This paper makes the case that purposive, profit-seeking investments in knowledge play a critical role in the long-run growth process. First, we review the implications of neoclassical growth theory and the more recent theories of "endogenous growth." Then we discuss the empirical evidence that bears on the modeling of long-run growth. Finally, we describe in more detail a model of growth based on endogenous technological progress and discuss the lessons that such models can teach us.

**PD** December 1993. **TI** The Politics of Free Trade Agreements. **AU** Grossman, Gene M.; Helpman, Elhanan. **AA** Grossman: Princeton University. Helpman: Tel Aviv University and CIAR. **SR** Princeton University, Woodrow Wilson School Discussion Paper in Economics: 166; Woodrow Wilson School, Robertson Hall, Princeton University, Princeton, NJ 08544. **PG** 49. **PR** no charge. **JE** F13, F15, D78. **KW** Free Trade Agreement. Regional Integration. Political Economy. Trade Policy.

**AB** Suppose that an opportunity arises for two countries to negotiate a free trade agreement (FTA). Will an FTA between these countries be politically viable? And if so, what form will it take? We address these questions using a political-economy framework that emphasizes the interaction between industry special interest groups and an incumbent government. We describe the economic conditions necessary for an FTA to be an equilibrium outcome, both for the case when the agreement must cover all bilateral trade and when a few, politically sensitive sectors can be excluded from the agreement.

**PD** January 1994. **TI** Economic Growth and the Environment. **AU** Grossman, Gene M.; Krueger, Alan B. **AA** Princeton University. **SR** Princeton University, Woodrow Wilson School Discussion Paper in Economics: 167; Woodrow Wilson School, Robertson Hall, Princeton University, Princeton, NJ 08544. **PG** 40. **PR** no charge. **JE** Q25, O57. **KW** Pollution. Air Quality. Water Quality. Renewable Resources.

**AB** Using data assembled by the Global Environmental Monitoring System we examine the reduced-form relationship between various environmental indicators and the level of a country's per capita income. Our study covers four types of indicators: concentrations of urban air pollution; measures of the state of the oxygen regime in river basins; concentrations of fecal contaminants in river basins; and concentrations of heavy metals in river basins. We find no evidence that environmental

quality deteriorates steadily with economic growth. Rather, for most indicators, economic growth brings an initial phase of deterioration followed by a subsequent phase of improvement. The turning points for the different pollutants vary, but in most cases they come before a country reaches a per capita income of \$8,000.

**PD** March 1994. **TI** Determinants of Air Pollution in U.S. Counties. **AU** Grossman, Gene M.; Krueger, Alan B.; Laity, James. **AA** Princeton University. **SR** Princeton University, Woodrow Wilson School Discussion Paper in Economics: 169; Woodrow Wilson School, Robertson Hall, Princeton University, Princeton, NJ 08544. **PG** 69. **PR** no charge. **JE** Q25, C82. **KW** Pollution. Air Quality. Renewable Resources.

**AB** This paper uses panel data from the Aerometric Information Retrieval System maintained by the U.S. Environmental Protection Agency to study the relationship between the composition and level of local economic activity and concentrations of six criteria pollutants in counties across the United States. We relate ambient air quality at a monitoring station to a cubic function of current county income, a cubic function of lagged county income, the percentage of earnings deriving from different sectors of the economy, and other variables. We find that the composition of output significantly affects local air quality but that changes in the composition do not account for the observed relationship between output levels and pollution. We discuss the various measurement problems that we confronted in trying to estimate the nature of the relationship between income and pollution.

#### Groth, Christian

**PD** December 1995. **TI** Growth With Public Research and Private Education. **AA** University of Copenhagen. **SR** University of Copenhagen, Institute of Economics, Discussion Paper: 95/20; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. **PG** 10. **PR** not available. **JE** E62, H21, O38. **KW** Endogenous Growth. Public Goods. Human Capital. Tax Smoothing. Debt-Income Ratio.

**AB** The paper investigates optimal taxation in a model where growth is the combined effect of public R&D and private human capital accumulation. A tax smoothing formula is called for. This leads to a long-run debt-income ratio related to the initial configuration of the stocks of technical knowledge, human capital and physical capital.

#### Grover, Philip

**PD** March 1996. **TI** The Stroudwater Canal Company and its Role in the Mechanisation of the Gloucestershire Woollen Industry, 1779-1840. **AA** Oriel College, Oxford. **SR** University of Oxford, Discussion Papers in Economic and Social History: 4; Avner Offer, Nuffield College, Oxford, OX1 1NF. **PG** 28. **PR** not available. **JE** D23, L67, N73. **KW** Transportation Costs. Modernization. Steam Power. Coal.

**AB** It is commonly accepted that the decline of the West's woollen industry was in large part due to the greater employment of steam power by the Yorkshire industry. Using the account books of the Stroudwater Canal Company, the article examines the role of the Stroudwater Canal in bringing coal to the mechanizing woollen industry in the Stroudwater region of the Gloucestershire industry. It is shown that distance was not the main factor in the movement of coal, but that toll

levels were more important. The article shows that the toll levels significantly affected the amount of steam power employed in the Gloucestershire woollen industry and that the Stroudwater Canal Company therefore played a significant role in the industry's decline during the early nineteenth century.

#### Gruber, Jonathan

**TI** Health Insurance Eligibility, Utilization of Medical Care, and Child Health. **AU** Currie, Janet; Gruber, Jonathan.

**PD** March 1995. **TI** The Incidence of Payroll Taxation: Evidence from Chile. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5053; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 28. **PR** \$5.00. **JE** J22, H22, H55. **KW** Chile. Payroll Tax. Incidence. Unemployment.

**AB** Despite the growing reliance on payroll taxation worldwide, there is limited evidence on the incidence of payroll taxes. I provide new evidence by examining the experience of Chile before and after the privatization of its Social Security system. This policy change led to a sharp exogenous reduction in the payroll tax burden on Chilean firms; the average payroll tax rate in my sample fell from 30 percent to 5 percent over this six year period. I use data from a census of manufacturing firms, which contains information on firm specific tax payments and average wages. I find strong evidence that the incidence of payroll taxation was fully on wages, with no effect on employment. A potential weakness with this approach is that some of the variation in firm-specific tax rates may be spurious, for example due to measurement error in wages. I attempt to surmount this problem by using a variety of different estimators, all of which yield consistent evidence of full shifting.

#### Gruen, David

**TI** Price Stickiness and Inflation. **AU** Lourenco, Richard De Abreu; Gruen, David.

#### Gual, Jordi

**TI** Trade and Foreign Direct Investment with Central and Eastern Europe: Its Impact on Spain. **AU** Martin, Carmela; Gual, Jordi.

#### Guerre, Emmanuel

**TI** The Limit Distribution of Level Crossings of a Random Walk, and a Simple Unit Root Test. **AU** Burridge, Peter; Guerre, Emmanuel.

#### Gulde, Anne-Marie

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

#### Gunnarsson, Jan

**PD** June 1995. **TI** Economic Properties and Expectations: How the Process of Learning Develops by Selection. **AA** University of Copenhagen. **SR** University of Copenhagen, Institute of Economics, Discussion Paper: 95/04; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. **PG** 28. **PR** not available. **JE** D21, D83. **KW** Rational

Expectations. Learning. Firm Behavior.

**AB** This paper extends learning concepts developed in economics to take into account the fact that agents are not fully rational. Contrary to scholars who model individuals as if they know the equilibrium relationships between market prices and private signals, a dynamic process is proposed, by means of which beliefs about macroeconomic properties are acquired. At the center of concern is the formation of expectations in business firms. A perspective on the kind of decision discussed in this paper will refer to bounded rationality and Standard Operating Procedures. Learning in enterprises is analyzed in terms of ongoing reasoning processes, which, unlike the maximizations based on classical definitions of mathematical concepts, are framed by common sense concepts.

### Gunning, Jan Willem

**TI** Trade Policy and Regional Integration: Implications for the Relations between Europe and Africa. **AU** Collier, Paul; Gunning, Jan Willem.

### Gutierrez, J.M

**PD** October 1995. **TI** The Logic and Alternative Measurement Systems in Financial Accounting. **AU** Gutierrez, J.M.; Whittington, Geoffrey. **AA** Gutierrez: University of Salamanca. Whittington: University of Cambridge. **SR** University of Cambridge, Discussion Papers in Accounting and Finance: AF11; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 36. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** M41, C63. **KW** Measurement Systems. Financial Accounting.

**AB** This paper explores the properties of alternative measurement systems in financial accounting, using deductive methods supported by mathematical proofs. It extends the earlier analysis of Gutierrez (1990 and 1992) to complete accounting systems and explores the temporal consistency of such systems. Temporal consistency requires two properties: perdurability and valuation neutrality. Of the systems studied, only pure historical cost accounting satisfies these criteria.

### Haaland, Jan I.

**PD** July 1994. **TI** The Uruguay Round and Trade in Manufactures and Services. General Equilibrium Simulations of Production, Trade and Welfare Effects of Liberalization. **AU** Haaland, Jan I.; Tollenfsen, Truls Cook. **AA** Haaland: Centre for International Economics and Shipping and Norwegian School of Economics and Business Administration. Tollenfsen: Foundation for Research in Economics and Business Administration (SNF). **SR** Centre for Economic Policy Research, Discussion Paper: 1008; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 29. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** D58, F12, F13, F15, F17. **KW** GATT, Liberalization, Regionalization, Trade Policy.

**AB** Using a numerical general equilibrium model we examine the possible production, trade and welfare effects of successful implementation of the Uruguay Round results. The model includes trade in manufactures and (some) services among industrial regions and countries; there is imperfect competition in most markets in the model, and we account for reductions in both tariffs and non-tariff barriers (NTBs). Our

results indicate that the welfare effects of the liberalization we consider (i.e. ignoring both agriculture and trade with developing countries) may be fairly limited. Compared with a scenario of GATT failure and global protectionism, on the other hand, the gains are significant, and we conclude that the Uruguay Round plays an important role in avoiding a trade war in manufactures. We also show that the dynamic effects through endogenous investment growth might be just as important as the static effects reported.

### Hadjimichael, Michael T.

**TI** Growth in Sub-Saharan Africa. **AU** Ghura, Dhaneshwar; Hadjimichael, Michael T.

### Hadri, Kaddour

**TI** Bias Nonmonotonicity in Stochastic Difference Equations. **AU** Abadir, Karim M.; Hadri, Kaddour.

**PD** November 1995. **TI** Efficiency, Environmental Contaminants and Farm Size: Testing for Links Using Stochastic Production Frontiers. **AU** Hadri, Kaddour; Whittaker, Julie. **AA** University of Exeter. **SR** University of Exeter, Department of Economics Discussion Paper: 95/05; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. **PG** 18. **PR** no charge. **JE** C23, C24, D24. **KW** Frontier Production. Technical Efficiency. Panel Data. Environment. Farm Size.

**AB** This paper investigates whether there is any relationship between farm size, technical efficiency and the use of agrichemicals which are potentially environmentally contaminating. These questions are pertinent in the context of current EU policy decisions. Using two models of stochastic frontier production and a set of panel data on 35 farms from the South West of England for the years 1987-1991, we obtain an indication, that there is a positive, though weak relationship between technical efficiency and use of contaminants, and between technical efficiency and farm size. However, there is a negligible negative relationship between farm size and use of contaminants.

### Hagemann, Robert P.

**PD** November 1995. **TI** A Fiscal Stance in Sweden: A Generational Accounting Perspective. **AU** Hagemann, Robert P.; John, Christoph. **AA** International Monetary Fund. **SR** International Monetary Fund, Working Paper: 95/105; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 25. **PR** not available. **JE** H62, H61, C82. **KW** Generational Accounting. Social Insurance.

**AB** Generational accounts provide answers to a simple question: how much will future generations have to pay in net taxes as compared to today's generations? In this paper, we review the concept of generational accounting and provide estimates for Sweden, where public finances deteriorated substantially after 1990. Accounts are computed on the basis both of policies in place in September 1994 and of subsequent measures adopted before end-1994. The results suggest that the measures will improve significantly the relative position of future generations, who would nevertheless continue to face a large net tax burden.

### Haldane, Andrew G.

**TI** Volatility Transmission Along the Money Market Yield

Curve. AU Huertas, Juan Ayuso; Haldane, Andrew G.; Restoy, Fernando.

**TI** The Interest Rate Transmission Mechanism: Sectorial Estimates for Spain. AU Escriva, Jose Luis; Haldane, Andrew G.

### Haldrup, Niels

**TI** Multicointegration and Present Value Relations. AU Engsted, Tom; Gonzalo, Jesus; Haldrup, Niels.

**TI** Estimating the LQAC Model With I(2) Variables. AU Engsted, Tom; Haldrup, Niels.

**TI** Multiple Unit Roots in Periodic Autoregression. AU Boswijk, Peter; Franses, Philip Hans; Haldrup, Niels.

**TI** Separation in Cointegrated Systems, Long Memory Components and Common Stochastic Trends. AU Granger, Clive W. J.; Haldrup, Niels.

### Hallett, Andrew Hughes

**TI** Unification and the Policy Predicament in Germany. AU Ma, Yue; Hallett, Andrew Hughes; Melitz, Jacques.

### Halpern, Laszlo

**PD** September 1994. **TI** Comparative Advantage and Likely Trade Pattern of the CEECs. AA Hungarian Academy of Sciences. SR Centre for Economic Policy Research, Discussion Paper: 1003; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 31. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F14, P52. KW Comparative Advantage. Central and Eastern Europe. FDI.

**AB** The paper investigates the comparative advantage of Central and East European Countries (CEECs) through the analysis of commodity patterns of foreign trade. Due to rapid changes in production and trade structures the revealed comparative advantage may reflect both the old and the emerging capacities. Hence, outward processing trade, labor cost, human capital and foreign direct investment are also treated to assess the likely future trade pattern.

### Hansen, Henrik

**PD** April 1995. **TI** Common Trends Analysis of Danish Unemployment. AU Hansen, Henrik; Warne, Anders. AA Hansen: University of Copenhagen. Warne: Stockholm University. SR University of Copenhagen, Institute of Economics, Discussion Paper: 95/03; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. PG 52. PR not available. JE E24, J23. KW Cointegration. Common Trends. Unemployment Hysteresis. Identification. Supply and Demand Shocks.

**AB** We study the Danish unemployment experience 1905-92 using a multivariate common trends model with cointegration constraints. To interpret the empirical results we analyze a simple macroeconomic model of the labor market. The empirical results indicate that there are three cointegration relations and two common trends among the five variables we examine, and the economic model suggests that the trends are due to technology and labor supply. Moreover, Danish unemployment appears to be nonstationary. Based on the identifying assumption of constant returns to scale in production, from the empirical common trends analysis we find

that shocks to labor supply are the source behind hysteresis in unemployment.

### Hansen, Lill

**TI** Public Policy and Economic Growth in an Imperfectly Competitive World of Interdependent Economies. AU Blackburn, Keith; Hansen, Lill.

### Hansen, Nico A.

**PD** March 1995. **TI** Endogenous Technology Choice and the Big Push. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/473; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 12. PR no charge. JE O14, O33, H32, O58. KW Big Push. Industrialization. Technology Choice. Development. Multiple Equilibria. Property Rights.

**AB** We present a general equilibrium model of imperfect competition to analyze Rosenstein-Rodan's idea of the "Big Push". Simultaneous investment of many sectors of the economy can be profitable for everyone although no sector can break even industrializing alone. The mechanism that generates such multiple macroeconomic equilibria is a demand spillover that influences how factor-saving the chosen production technologies are. Contrary to the existing "Big Push" literature, we show that pure profit spillovers can cause multiple equilibria. Equilibria with modern technologies are preferable to others. Adoption of highly productive technologies may be the only way to get out of a "bad" equilibrium. Technology choice crucially depends on the property rights on profits and is shown to be extremely fragile with respect to policy.

**PD** March 1995. **TI** Privatization, Technology Choice and Aggregate Outcomes. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/474; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 22. PR no charge. JE O33, P11, E62, H32. KW Privatization. Transition. Technology Choice. Multiple Equilibria. Demand Spillovers.

**AB** We present a general equilibrium model of imperfect competition to analyze different policy measures in transition economies. Due to strategic complementarities in technology choice and demand spillovers, the possibility of multiple macroeconomic equilibria arises. Those equilibria can be Pareto-ranked. Equilibria where modern technologies are employed are preferable. Technology adoption crucially depends on how property rights are distributed and which method of privatization is chosen. The existence and occurrence of "good" equilibria is extremely fragile with respect to policy. Contrary to conventional wisdom, we show that a broad distribution of ownership rights can have favorable influence on micro-economic efficiency and may therefore lead to a "good" aggregate outcome. Sales to single or core investors, if accompanied by workers' equity shares, may perform worse. Furthermore, only a Big Bang approach to privatization might lead to favorable outcomes.

### Hansen, Per Svejstrup

**PD** November 1995. **TI** Permanent Effects of Monetary Policy in a Dynamic Menu Cost Model. AA University of Aarhus. SR University of Aarhus, Department of Economics, Memo: 1995/15; Department of Economics, University of Aarhus, Building 350, Universitetsparken,

DK/8000 Aarhus C, DENMARK. PG 7. PR no charge. JE E31, E52. KW Menu Costs. (S,s)-rules. Monetary Policy. Uncertainty.

AB This paper investigates whether systematic monetary policy can affect output in a dynamic menu cost model which result in (S,s) price rules. It will be shown that monetary policy potentially can affect output, not only in the short-run but also the long-run average output. That is, even though the policy rule is fully known by the rational firm, perfectly anticipated monetary policy has a permanent real effect in the long-run.

#### Hansen, Wendy L.

PD March 1995. TI Cumulation and ITC Decision-Making: The Sum of the Parts is Greater Than the Whole. AU Hansen, Wendy L.; Prusa, Thomas J. AA Hansen: University of New Mexico. Prusa: State University of New York at Stony Brook and National Bureau of Economic Research. SR National Bureau of Economic Research, Working Paper: 5062; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 28. PR \$5.00. JE F13, H25. KW International Trade. Dumping. Duties.

AB In 1984 Congress amended the antidumping (AD) and countervailing duty (CVD) laws, mandating that the International Trade Commission (ITC) "cumulate" imports across countries when determining injury. Since 1984 the cumulation provision has been invoked in over 50 percent of the AD and CVD cases. We estimate that cumulation increases the probability of an affirmative injury determination by 20 to 30 percent and has changed the ITC's decision (from negative to affirmative) for about one-third of cumulated cases. We also show that the protective effect of cumulation increases as the number of countries involved increases, holding import market share constant. That is, cumulated imports have a super-additive effect on ITC decision-making.

#### Hao, Kang

PD October 1995. TI A Modified Fluctuation Test for Structural Change. AU Hao, Kang; Inder, Brett A. AA Monash University. SR Monash University, Department of Econometrics Working Paper: 18/95; Department of Econometrics, Monash University, Clayton, Victoria 3168. AUSTRALIA. PG 19. PR no charge. JE C52. KW Structural Change. Fluctuation Test. SupF Test.

AB This paper investigates the problem of testing for structural change for diagnostic purposes. We propose a modified form of the fluctuation test of Ploberger et al. (1989). The modified fluctuation test has the same asymptotic distribution as the fluctuation test but much better finite sample performance. A comparison of the supF test of Andrews (1993) shows that both tests are actually based on the same components.

#### Hariri, A.M.A

TI Branch and Bound Algorithms for Single Machine Scheduling With Batch Set-Up Times to Minimize Total Weighted Completion Time. AU Crauwels, H.A.J.; Hariri, A.M.A.; Potts, C.N.; Van Wassenhove, Luk N.

#### Harms, Philipp

TI Mass Privatization, Management Control and Efficiency. AU Boes, Dieter; Harms, Philipp.

#### Harris, David C.

TI The Application of the Durbin-Watson Test to the Dynamic Regression Model Under Normal and Non-Normal Errors. AU King, Maxwell L.; Harris, David C.

#### Harris, Mark N.

TI Combining Choice Set Partition Tests for the Independence of Irrelevant Alternatives Properties: Size Properties in the Four Alternatives Setting. AU Brooks, Robert D.; Fry, Tim R.L.; Harris, Mark N.

TI The Size and Power Properties of Combining Choice Set Partition Tests for the IIA Property in the Logit Model. AU Brooks, Robert D.; Fry, Tim R.L.; Harris, Mark N.

#### Harris, Richard

TI Irrational Analysts' Expectations as a Cause of Excess Volatility in Stock Prices. AU Bulkeley, George; Harris, Richard.

PD February 1996. TI Inference for Unit Roots in Dynamic Panels. AU Harris, Richard; Tzavalis, Elias. AA University of Exeter. SR University of Exeter, Department of Economics Discussion Paper: 96/04; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 14. PR no charge. JE C22, C23, F43. KW Panel Data. Unit Roots. Fixed Effects. Central Limit Theorem.

AB This paper proposes similar unit root testing procedures for both homogenous and heterogeneous dynamic panel data models, based on Least Squares estimates and assuming that the time dimension of the panel is fixed. It is shown that the limiting distribution of the tests is standard normal. Similarity with regard to the initial conditions is achieved by including fixed effect dummy variables in the autoregression, while similarity with respect to the fixed effects is achieved by including a linear trend for each individual unit of the panel. When fixed effects or individual trends are included as regressors, the Least Squares estimate of the autoregressive parameter is inconsistent and thus the test statistics must be corrected for the asymptotic bias. Simulation evidence suggests that the proposed tests have empirical size that is very close to the nominal 5% level and considerably more power than other panel unit root tests and the corresponding unit root tests for the single time series case.

TI Why Does the Ratio of Book to Market Value of Equity Explain Cross-Section Stock Returns? AU Bulkeley, George; Harris, Richard.

#### Hatton, Timothy J.

TI The Origins and Early Impact of the Minimum Wage in Agriculture. AU Gowers, Robin; Hatton, Timothy J.

#### Haurin, Donald R.

PD March 1995. TI Wealth Accumulation and Housing Choices of Young Households: An Exploratory Investigation. AU Haurin, Donald R.; Hendershott, Patric H.; Wachter, Susan M. AA Haurin: Ohio State University. Hendershott: Ohio State University and National Bureau of Economic Research. Wachter: University of Pennsylvania. SR National Bureau of Economic Research, Working Paper: 5070; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 28. PR \$5.00. JE R21,

D12, E21. KW Housing. Rentals. Marriage. Wealth.

AB This paper describes the wealth accumulation of American youth and relates this behavior to their eventual housing choices. We develop a data set that links wealth profiles of youth with constant-quality house prices and tenure choice. A panel data set is compiled for youth age 20- 33 for the years 1985 through 1990. We construct wealth profiles for each household over the six year period and indicate how wealth varies with labor supply, marriage, fertility, gender, education, race/ethnicity, and tenure choice. We find renters' wealth accumulates rapidly in the year before and year of first home ownership. The factors related to this increase are marriage, increased labor supply by married women, and gifts/inheritances. Of particular interest is the finding of an inverse U-shaped relationship between the local real price of housing and middle and upper income renters' wealth and married female labor supply. Also, youth in high housing cost localities tend to live in groups at a greater rate compared to those in low cost areas.

TI Selling Price and Selling Time: The Impact of Seller Motivation. AU Glower, Michel; Hendershott, Patric H.; Haurin, Donald R.

#### Hechler, Nannette

PD May 1995. TI Estimating the Benefits of a Common European Fiscal Policy. AA Departement d'Economie Politique and Universite de Lausanne. SR Universite de Lausanne Cahiers de Recherches Economiques: 9506; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 30. PR no charge. JE E32, E63. KW Consumption Instability. Europe. Stabilization Policy.

AB This paper addresses two main issues. First, it investigates the extent to which macroeconomic stabilization is desirable from the point of view of the consumer in the European Community, by estimating the perceived costs of consumption instability. Second, being aware that consumption shocks can probably not be entirely eliminated and that individual countries' consumption risk could at best be diversified through an EC-level insurance mechanism, we focus explicitly on the benefits of such a stabilization policy. Our estimators are based on three alternative models for consumption: a trend stationary, a random walk and an autoregressive model. The results show that traditional stabilization policies associated with temporary shocks may not generate significant benefits.

PD February 1996. TI Environmental Quality and Economic Development. AA Departement d'Econometrie et d'Economie Politique, Ecole des HEC and Universite de Lausanne. SR Universite de Lausanne Cahiers de Recherches Economiques: 9603; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 38. PR no charge. JE O11, Q25, Q21. KW Environmental Quality. Economic Development. Dynamics.

AB There is an emerging consensus that many components of environmental quality exhibit a U-shaped relationship with economic development, that is, environment is first heavily degraded during an initial transitory phase but subsequently improves after a critical level of development has been reached. This paper provides a simple neoclassical growth model in which the interactions of growth and environmental quality can

be studied. It is used to derive joint optimal time paths for the index of environmental quality and per capita physical capital stock which constitutes a measure of economic development. We show in particular that U-shaped patterns can be optimal depending on capital share in output and relative preferences for consumption.

#### Heckman, James

PD May 1994. TI Accounting for Dropouts in Evaluations of Social Experiments. AU Heckman, James; Smith, Jeffrey; Taber, Christopher. AA University of Chicago. SR Economics Research Center/NORC Discussion Paper: 94/3; Economics Research Center/NORC, 1155 E. 60th Street, Chicago, IL 60637. PG 22. PR \$2.00; send requests to Librarian, NORC. JE C81, C34. KW Social Experiments. Dropouts. Identification. JTPA Data.

AB This paper considers the statistical and economic justification for one widely-used method of adjusting data from social experiments to account for dropping-out behavior due to Bloom (1984). We generalize the method to apply to distributions, not just means, and present tests of the key identifying assumption in this context. A reanalysis of the National JTPA experiment vindicates application of Bloom's method in this context.

#### Helbling, Thomas

PD December 1995. TI Real Interest Rates, Real Exchange Rates, and Net Foreign Assets in the Adjustment Process. AU Helbling, Thomas; Turtelboom, Bart. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/129; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 28. PR not available. JE F31, F41, F47. KW Foreign Exchange. Imperfect Competition.

AB This paper analyzes the recent behavior of real exchange rates, the trade balance and the net foreign asset position of the United States in an intertemporal optimizing model of the world economy that incorporates heterogeneity across countries and imperfect international capital and good markets. While the model successfully tracks the dynamics of trade balances and net foreign assets it generates too much consumption smoothing and excessively volatile relative prices. Resolving these inadequacies simultaneously is difficult as the elasticity of substitution between tradables and nontradables affects in opposite ways the degree of consumption smoothing and the volatility of relative prices.

#### Hellerstein, Judith K.

PD July 1995. TI Sex, Wages, and Productivity: An Empirical Analysis of Israeli Firm- Level Data. AU Hellerstein, Judith K.; Neumark, David. AA Hellerstein: Northwestern University. Neumark: Michigan State University. SR Michigan State University, Econometrics and Economic Theory Papers: paper number not available; Department of Economics, Michigan State University, East Lansing, Michigan 48824. PG 37. PR not available. JE J31, J71. KW Labor Market. Sex Discrimination. Wages. Productivity. Female Workforce.

AB One potentially important form of sex discrimination in labor markets is a wage gap between women and men that is larger than the gap (if it exists) between their marginal products. In contrast to wage regression tests for this form of discrimination, we obtain direct estimates of sex differences in



marginal products to compare with sex differences in wages. We use a firm level data set on manufacturing firms in Israel that contains information on the sex composition of firms' workforces, average labor costs of the firm, and variables required to estimate production functions. There is a statistically significant negative association between wages and the percent of a firm's female workforce. However, there is also a statistically significant negative association between marginal productivity and the percent of female employees. The estimates suggest that the wage gap is larger than the productivity gap. But the difference between the wage and productivity gaps is small relative to wage regression estimates (two to eight percentage points), and it is not statistically significant. We also present some evidence that the lower wages and productivity associated with female workers is not attributable to the crowding of women into particular jobs.

### Helpman, Elhanan

TI Endogenous Innovation in the Theory of Growth. AU Grossman, Gene M.; Helpman, Elhanan.

TI The Politics of Free Trade Agreements. AU Grossman, Gene M.; Helpman, Elhanan.

TI North-South Research and Development Spillovers. AU Coe, David T.; Helpman, Elhanan; Hoffmaister, Alexander W.

### Hendershott, Patric H.

PD March 1995. TI Debt Usage and Mortgage Choice: Sensitivity to Default Insurance Costs. AU Hendershott, Patric H.; LaFayette, William C. AA Hendershott: The Ohio State University and National Bureau of Economic Research. LaFayette: The Ohio State University. SR National Bureau of Economic Research, Working Paper: 5069; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 25. PR \$5.00. JE D12, R21, G21. KW Mortgages. Fixed Rate. FHA. Insurance.

AB Purchase of a house requires three interrelated household financial decisions: what level of debt to obtain, whether to select an adjustable or fixed rate mortgage (ARM or FRM) and whether to choose an FHA or a conventional loan. While some have analyzed the mortgage debt decision and the ARM/FRM choice, virtually no one has studied the FHA/conventional mortgage choice or the interrelation among the mortgage debt and instrument decisions. In our sample of 819 young home purchasers, debt and mortgage choice is driven by a need to finesse the down payment and payment constraint ratios and to lower mortgage insurance costs.

TI Wealth Accumulation and Housing Choices of Young Households: An Exploratory Investigation. AU Haurin, Donald R.; Hendershott, Patric H.; Wachter, Susan M.

TI Selling Price and Selling Time: The Impact of Seller Motivation. AU Glower, Michel; Hendershott, Patric H.; Haurin, Donald R.

### Henderson, Rebecca

PD March 1995. TI Universities As a Source of Commercial Technology: A Detailed Analysis of University Patenting 1965-1988. AU Henderson, Rebecca; Jaffe, Adam B.; Trajtenberg, Manuel. AA Henderson: Massachusetts Institute of Technology and National Bureau of Economic Research. Jaffe: Brandeis University and National Bureau of

Economic Research. Trajtenberg: Tel Aviv University and National Bureau of Economic Research. SR National Bureau of Economic Research, Working Paper: 5068; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 23. PR \$5.00. JE K11, O34. KW University. Patents. Research and Development.

AB This paper explores changes in university patenting behavior between 1965 and 1988. We show that university patents have increased 15-fold while real university research spending almost tripled. The causes of this increase are unclear, but may include increased focus on commercially relevant technologies, increased industry funding of university research, a 1980 change in federal law that facilitated patenting of results from federally funded research, and the widespread creation of formal technology licensing offices at universities. Up until approximately the mid-1980s, university patents were highly cited, and were cited by more technologically diverse patents, than a random sample of all patents. This difference is consistent with the notion that university inventions are more important and more basic than the average invention. The differences between the two groups disappeared, however, in the middle part of the 1980s, partly due to a decline in the citation rates for all universities, and partly due to an increasing share of patents going to smaller institutions, whose patents are less highly cited throughout this period. Moreover at both large and small institutions there was a large increase in the fraction of university patents receiving zero citations. Our results suggest that the rate of increase of important patents from universities is much less than the overall rate of increase of university patenting in the period covered by our data.

### Hendon, Ebbe

PD June 1995. TI Decentralized Trade in a Small Market: The Possibility of Resale. AU Hendon, Ebbe; Tranaes, Torben. AA Ebbe: University of Copenhagen. Tranaes: Copenhagen Business School. SR University of Copenhagen, Institute of Economics, Discussion Paper: 95/06; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. PG 43. PR not available. JE C78, D51, D61. KW Resale. Decentralized Trade. Competitive Equilibrium. Bargaining. Markets.

AB A matching and bargaining model in a market for a single good with one seller and two different buyers is analyzed under the assumption that resale is possible (buying the good does not necessarily mean consuming it). It is known that the model without resale has inefficient equilibria in which the low buyer receives the good with high probability, even as friction becomes negligible. We show that in case the good is a non-durable (i.e., it yields no interests) resale opportunities do not ensure efficiency. Whereas in case the good is durable the resale model has a unique and efficient equilibrium.

PD June 1995. TI Adaptive Learning in Extensive Form Games and Sequential Equilibrium. AU Hendon, Ebbe; Jacobsen, Hans Jorgen; Sloth, Birgitte. AA University of Copenhagen. SR University of Copenhagen, Institute of Economics, Discussion Paper: 95/08; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. PG 28. PR not available. JE C79, D83. KW Adaptive Learning. Extensive Form Games. Sequential Equilibrium.

AB This paper gives a definition of adaptive learning for extensive form games and provides sufficient conditions for

convergence points of adaptive learning sequences to be sequential equilibria.

**PD** June 1995. **TI** NASH Equilibrium in Lower Probabilities. **AU** Hendon, Ebbe; Jacobsen, Hans Jorgen; Sloth, Birgitte; Tranaes, Torben. **AA** Ebbe, Hans and Sloth: University of Copenhagen. Tranaes: Copenhagen Business School. **SR** University of Copenhagen, Institute of Economics, Discussion Paper: 95/09; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. **PG** 30. **PR** not available. **JE** C70, C10. **KW** Nash Equilibrium. Belief Function. Probability Measure.

**AB** A Nash equilibrium can be interpreted as a common theory about the players' actions. It is required that the theory is consistent with each player choosing an optimal response to the theory. It is usually required that the theory takes the form of a combination of probability measures on players' strategies. We analyze the effects of relaxing this requirement, allowing the theory to take the form of a lower probability measure, also called a belief function. In particular this allows for a strategy that is never a best reply against probability measures on other players to be part of an equilibrium.

#### Hendricks, Ken

**PD** July 1995. **TI** Entry and Exit in Hub-Spoke Networks. **AU** Hendricks, Ken; Piccione, Michele; Tan, Guofu. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 95/20; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 26. **PR** 20 cents per page Canadian to other than educational institutions. **JE** L11, L93, L13. **KW** Complementarities. Entry Deterrence. Hub-Spoke Networks.

**AB** In this paper, we offer an explanation for why regional carriers have difficulty surviving in hub-spoke networks. In a hub-spoke network within cities, the connecting flights that service a nonhub city-pair market are complementary goods. Travelers must purchase two tickets: one to fly from the nonhub city to the hubcity and one to fly from the hub city to the destination city. If a regional carrier invades a spoke, competition between it and the hub operator lowers prices and profits for flying on the spoke. The hub operator can partially offset the loss by adjusting prices on the n-2 complementary flights. If instead the hub operator decides to exit, the price for traveling on the spoke increases and demands in the associated connecting markets decrease. Consequently, if the size of the network is large enough, the hub operator's optimal response to entry in a spoke is not to withdraw its flights from that spoke, even if the regional carrier stays. As a result, regional carriers are forced to exit and entry is deterred.

#### Henry, Claude

**PD** April 1996. **TI** Concurrence et Services Publics Dans l'Union Europeenne. **AA** Departement d'Econometrie et d'Economie Politique, Ecole des HEC and Universite de Lausanne. **SR** Universite de Lausanne Cahiers de Recherches Economiques: 9608; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. **PG** 34. **PR** no charge. **JE** D43, D62, L32. **KW** Concurrence. Service Public. Coordination.

**AB** The evolving relationship between the European Union

and Europe's public enterprises is explored.

#### Henry, S.G.B

**TI** Aspects of the Swiss Labor Market. **AU** De Masi, Paula; Henry, S.G.B.

#### Hens, Thorsten

**TI** Market Demand Functions in the CAPM. **AU** Bottazzi, Jean-Marc; Hens, Thorsten; Loeffler, Andras.

**PD** December 1995. **TI** Existence and Uniqueness of Equilibria in the CAPM with a Riskless Asset. **AU** Hens, Thorsten; Loeffler, Andras. **AA** Hens: University of Bonn. Loeffler: Free University of Berlin. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/504; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 13. **PR** no charge. **JE** G12, C62. **KW** CAPM. Uniqueness. Existence. Risk Aversion.

**AB** In the standard CAPM with a riskless asset we prove existence of equilibria without assuming concavity of the investor's utility functions. Moreover, we give a uniqueness result using assumptions on the risk aversion of investors.

#### Hibon, M.

**TI** The Accuracy of Extrapolative Forecasting Methods: Additional Empirical Evidence. **AU** Fildes, R.; Hibon, M.; Makridakis, S.; Meade, N.

**TI** Evaluating Accuracy (or Error) Measures. **AU** Makridakis, S.; Hibon, M.

**TI** ARMA Models and the Box Jenkins Methodology. **AU** Makridakis, S.; Hibon, M.

**TI** ARMA Models and the Box Jenkins Methodology. **AU** Makridakis, S.; Hibon, M.

#### Hildenbrand, Werner

**TI** Metonymy and Cross Section Demand. **AU** Evstigneev, Igor V.; Hildenbrand, Werner; Jerison, Michael.

#### Hoedemaker, G.M

**PD** January 1995. **TI** Limits to Concurrence. **AU** Hoedemaker, G.M.; Blackburn, Joseph D.; Van Wassenhove, Luk N. **AA** Hoedemaker and Van Wassenhove: INSEAD. Blackburn: Vanderbilt University. **SR** INSEAD, Working Papers: 95/27/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 21. **PR** not available. **JE** C61, L23, O32. **KW** Concurrent Engineering. Research and Development.

**AB** In the global race to bring new products to market, many firms have adopted concurrent engineering as a technique to shrink development lead time. Due to the many concurrent engineering success stories in the business and engineering literature, a common misconception has grown that more concurrency is always better. The major contribution of this paper is a rigorous mathematical proof that limits to concurrency exist even in the simplified situation in which concurrency is modeled as the number of design modules to be executed in parallel. As complexities such as communication linkages between modules are layered onto our basic model, we show that the expected project completion time is minimized at a finite number of modules that decreases with added

complexity. In general, the more complex the project, the stricter the limits to concurrency. This strongly suggests that project managers should be cognizant of the potentially adverse effects of pushing concurrency too far.

### Hoekman, Bernard M.

PD August 1994. TI Antitrust-based Remedies and Dumping in International Trade. AU Hoekman, Bernard M.; Mavroidis, Petros C. AA Hoekman: The World Bank. Mavroidis: GATT. SR Centre for Economic Policy Research, Discussion Paper: 1010; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 27. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F13, K21. KW Competition Policy. Antidumping. Trade Negotiations.

AB This paper explores the possibility of governments seeking to agree to apply competition policy-based considerations and disciplines in the context of unfair trade allegations before turning to "standard" antidumping remedies. The premise of proponents of antidumping action is that the existence of market power in an exporter's home markets, or potential market dominance in the importing, host market is an important source of perceived "unfairness". The existence of such situations is not investigated by antidumping authorities, however. A proposal is made that allegations of dumping first be investigated by the competition authorities to determine the contestability of the relevant markets. The proposal avoids any need for harmonization of competition laws. All that would change in comparison to the status quo is that a necessary condition for antidumping is a finding by the competition authorities that the exporting firm's home market is not contestable, and the conclusion that no remedial action is possible through the application of the competition law. While ideally agreement along these lines would be sought in the multilateral (GATT) context, bilateral or regional trade agreements could also be concluded. For example, EU Cooperation or Association agreements might be extended along the lines proposed.

PD September 1994. TI Linking Competition and Trade Policies in Central and East European Countries. AU Hoekman, Bernard M.; Mavroidis, Petros C. AA Hoekman: The World Bank. Mavroidis: GATT. SR Centre for Economic Policy Research, Discussion Paper: 1009; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 28. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F13, F14, K21. KW Competition Policy. Trade Policy. Regional Trade Agreements. Central Europe. Eastern Europe.

AB This paper explores options for governments of Central and East European countries to increase the sensitivity of competition law enforcement to trade and investment policy, thereby supporting a liberal trade policy stance. The competition laws of these countries tend to resemble European Union (EU) competition disciplines (Articles 85-86 of the Treaty of Rome), but leave great scope for discretion on the part of enforcement authorities to interpret the relevant statutes. Much can therefore be done through appropriate wording of criteria and implementation guidelines within the framework of currently existing legislation. Active enforcement of competition laws and maintenance of a liberal trade policy will be crucial not only for national welfare, but also in terms of eliminating the threat of contingent protection on the part of

EU firms. It is suggested that a link be sought between competition law enforcement and antidumping investigations in the context of the Association Agreements with the EU.

### Hofbauer, Josef

PD June 1995. TI Evolutionary Selection Against Dominated Strategies. AU Hofbauer, Josef; Weibull, Jorgen W. AA Hofbauer: Institute of Advanced Study. Weibull: I.U.I. SR CEPREMAP Discussion Paper: 9506; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. PG 17. PR 25 F.F. JE C73, C72. KW Evolutionary Games. Rationalizable Strategies.

AB A class of evolutionary selection dynamics is defined, and the defining property, convex monotonicity, is shown to be sufficient and essentially necessary for the elimination of strictly dominated pure strategies. More precisely, in any convex-monotone dynamics all strictly dominated strategies are eliminated along all interior solutions. On the other hand, for all selection dynamics where the growth rates of pure strategies are determined by a non-convex function of their current payoffs we construct games with strictly dominated strategies that survive along a large set of interior solutions.

### Hoffmaister, Alexander W.

TI North-South Research and Development Spillovers. AU Coe, David T.; Helpman, Elhanan; Hoffmaister, Alexander W.

### Hombres, Cars

PD March 1995. TI Endogenous Business Cycles in a Two-Dimensional OLG Model. AU Hombres, Cars; De Vilder, Robin G. AA University of Amsterdam. SR CEPREMAP Discussion Paper: 9503; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. PG 23. PR 25 F.F. JE E32, E13. KW Nonlinear Business Cycles. Investment Constraints. The Return Map.

AB Recently it has been shown that complicated (forward) output equilibrium time paths exist in discrete time two-dimensional overlapping generations (OLG) model with productive investment and capital accumulation, even when the two goods, current leisure and future consumption, are gross substitutes. However, along the periodic and chaotic equilibrium cycles investment may become negative. In this paper we impose a non-negative investment constraints on the model. The global equilibrium dynamics is analyzed by a "return map" technique, which in fact reduces the dimension of the dynamic system from two to one. We show that complicated endogenous business cycles for an even larger set parameter values.

### Honohan, Patrick

PD October 1994. TI Currency Board or Central Bank? Lessons from the Irish Pound's Link with Sterling, 1928-79. AA Economic and Social Research Institute. SR Centre for Economic Policy Research, Discussion Paper: 1040; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 29. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE E48, E58, F31. KW Central Bank. Currency Board. Exchange Rate Regime. Ireland.

AB There has been a resurgence of interest in currency boards as a possible approach to achieving a stable currency in newly established or hyperinflationary financial systems. This

paper draws attention to one of the more successful currency board experiences, namely that of Ireland. We review the institutional arrangements which underpinned the Irish pound for a half-century and consider the benefits and costs which resulted. While the regime did have a credibility which led to low interest rates and a degree of price stability, its resilience was partly due to the large weakness of sterling, to which the Irish pound was pegged. As a result, the inflexibility of the system was not severely tested. An attempt in 1955 to evade the interest rate discipline of the regime was quickly punished, however, with far reaching policy consequences.

### Hu, T.C

PD June 1995. TI The Length and Width of Combinatorial Optimization Problems. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: 95847; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 3. PR no charge. JE C44, C61. KW Optimization Problems. Matroids.

AB The current leading question of  $P=NP?$  is crucial in understanding why a given problem is intrinsically hard. The dividing line between easy and hard problems is the existence of the polynomial algorithm, and the model of computation is the Turing Machine. Here we examine the intrinsic nature of a class of combinatorial optimization problems and show why some problems have polynomial algorithms and others do not. We use a high-level model, and define the length and width of a combinatorial optimization problem. The new model is based on certain assumptions and includes some basic combinatorial structures very much like the basic assumptions of a matroid.

PD August 1995. TI Optimum Alphabetic Binary Trees. AU Hu, T.C.; Morgenthaler, J.D. AA Hu: University of Bonn. Morgenthaler: University of California at San Diego. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: 95850; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 11. PR no charge. JE C44, C61. KW Alphabetic Binary Trees. Hu-Tucker Algorithm.

AB We describe a modification of the Hu-Tucker algorithm for constructing an optimal alphabetic tree that runs in  $O(n)$  time for several classes of inputs. These classes can be described in simple terms and can be detected in linear time. We also give simple conditions and a linear algorithm for determining if two adjacent nodes will be combined in the optimal alphabetic tree.

### Hu, Zuli

PD October 1995. TI Stock Market Volatility and Corporate Investment. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/102; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 15. PR not available. JE E22, G13, G28. KW Investment. Stock Volatility. Uncertainty.

AB Despite concerns are often voiced on the so called "excess volatility" of the stock market, little is known about the implications of market volatility for real economy. This paper examines whether the stock market volatility affects real fixed investment. The empirical evidence obtained from the US data shows that market volatility has independent effects on investment over and above that of stock returns. Volatility and its changes are negatively related to investment growth. To the extent volatility depresses fixed capital formation and hence

future income growth, the results suggest the desirability of reducing stock market volatility.

### Huertas, Juan Ayuso

PD not available. TI Volatility Transmission Along the Money Market Yield Curve. AU Huertas, Juan Ayuso; Haldane, Andrew G.; Restoy, Fernando. AA Huertas and Restoy: Banco de Espana. Haldane: Bank of England. SR Banco de Espana Documento de Trabajo: 9403; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. PG 30. PR not available. JE E43, E58. KW Interest Rates. Money Market. Volatility Transmission. Reserve Requirements.

AB In this paper we look to model the volatility of money market interest rates and the transmission of volatility along the money market yield curve in four countries: the UK, Germany, France and Spain. We use a conditional variance specification which is based on Nelson's Exponential ARCH. We find a significant volatility transmission effect from overnight to longer term money markets for France, Spain and the UK. We also find that, in our small cross section of countries, those with lower (higher) reserve requirements tend to have higher (lower) interbank interest rate volatility. However, reserve requirements generate a perverse seasonal effect: at the end of the maintenance period, both the level of the overnight interest rate volatility and the magnitude of the transmission effect to the rest of the yield curve are higher.

PD not available. TI Is Exchange Rate Risk Higher in the E.R.M. After the Widening of Fluctuation Bands? AU Huertas, Juan Ayuso; Jurado, Maria Perez; Restoy, Fernando. AA Banco de Espana. SR Banco de Espana Documento de Trabajo: 9419; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. PG 33. PR not available. JE F31, F33. KW Exchange Rate Risk. Credibility. European Monetary Systems. Fluctuation Bands.

AB This paper proposes an indicator of exchange rate risk for currencies subject to exchange rate regimes which are not perfectly credible. This indicator is applied to several EMS currencies for periods before and after the widening of the fluctuation bands. We find that, contrary to what standard (GARCh-type) estimates suggest, exchange rate risk within the ERM is generally lower after the band widening than before. However, exchange rate risk for currencies that left the ERM is currently higher than for ERM currencies and also higher than in the period when they belonged to the mechanism.

PD not available. TI Is There a Trade-Off Between Exchange Rate Risk and Interest Rate Risk? AA Banco de Espana. SR Banco de Espana Documento de Trabajo: 9529; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. PG 48. PR not available. JE E43, F31, F33, F36. KW European Monetary System. Exchange Rate Risk. Commitment.

AB This paper presents a simple macroeconomic model based on Sensson (1994). The model incorporates innovations that provide for a simultaneous explanation of the three basic findings in the empirical literature concerning the effects of the EMS on the levels of exchange rate risk and interest rate risk: the reduction in exchange rate variability when the degree of rigidity in the exchange rate commitment increases; the indetermination in the sign of the behavior of exchange rate risk when this commitment eases; and, lastly, the possibility

that, in some cases, a trade-off exists between exchange rate risk and interest rate risk, and that in other cases, both move in the same direction.

PD not available. TI Devaluations and Depreciation Expectations in the E.M.S. AU Huertas, Juan Ayuso; Jurado, Maria Perez. AA Banco de Espana. SR Banco de Espana Documento de Trabajo: 9531; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. PG 43. PR not available. JE F31, F33, F36. KW European Monetary System. Devaluation. Expected Depreciation. Exchange Rates. Credibility.

AB This paper proposes a method to estimate separately the size of the expected depreciation in an eventual devaluation of the central parity in the ERM, and the probability assigned by agents to this devaluation occurring in the short-run. The proposed method complements the information provided by the jumps observed in market exchange rates around realignments with the information contained in interest rate differentials on the future behavior of exchange rates. The separation of probability and size allows a richer analysis of the effects of devaluations on exchange rate credibility in the ERM.

#### Hurwicz, Leonid

PD April 1995. TI Implicit Functions and Diffeomorphisms without Continuous Differentiability. AU Hurwicz, Leonid; Richter, Marcel K. AA University of Minnesota. SR University of Minnesota, Center for Economic Research, Discussion Paper: 279; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. PG 31. PR no charge. JE C69, C61. KW Inverse Functions. Implicit Functions. Diffeomorphisms.

AB We prove implicit and inverse function theorems for non-continuously differentiable functions, and characterize non-continuously differentiable diffeomorphisms.

#### Ikeda, Kiyohiro

TI Mathematical Mechanism Underlying Ecolon-Mode and Shear-Band Formations. AU Murota, Kazuo; Ikeda, Kiyohiro.

#### Inder, Brett A.

TI A Modified Fluctuation Test for Structural Change. AU Hao, Kang; Inder, Brett A.

TI "Homogeneity of Variance Test" for the Comparison of Two or More Spectra. AU Maharaj, E. A.; Singh, N.; Inder, Brett A.

#### Irmen, Andreas

PD May 1995. TI Note on Duopolistic Vertical Restraints. AA University of Lausanne. SR Universite de Lausanne Cahiers de Recherches Economiques: 9507; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 12. PR no charge. JE D43, L42. KW Vertical Restraints. Exclusive Dealing. Contract Theory.

AB This paper reexamines a 3-stage game previously applied by Gal-Or (1991) to model manufacturers' choice of vertical restraints with downstream exclusive dealers. We show that the main result of the original paper hinges upon the used linear demand specification. Employing a modified demand technology we find that a (LP, LP)-equilibrium can be

compatible with high product differentiation as long as industry demand is sufficiently steep. The elasticity of industry demand turns out to have a decisive but so far neglected influence on double marginalization and on manufacturers' choice of contract.

#### Ishii, Shogo

TI The Mexican Financial Crisis: a Test of the Resilience of the Markets for Developing Country Securities. AU Andrews, David; Ishii, Shogo.

#### Jacobsen, Hans Jorgen

TI Adaptive Learning in Extensive Form Games and Sequential Equilibrium. AU Hendon, Ebbe; Jacobsen, Hans Jorgen; Sloth, Birgitte.

TI NASH Equilibrium in Lower Probabilities. AU Hendon, Ebbe; Jacobsen, Hans Jorgen; Sloth, Birgitte; Traanaes, Torben.

#### Jaffe, Adam B.

TI Universities As a Source of Commercial Technology: A Detailed Analysis of University Patenting 1965-1988. AU Henderson, Rebecca; Jaffe, Adam B.; Trajtenberg, Manuel.

#### Jeanne, Olivier

TI Adam Smith's Second Invisible Hand. AU Corneo, Giacomo G.; Jeanne, Olivier.

TI Status-Seeking Can Generate Long-Run Growth in the Solow-Cass Model. AU Corneo, Giacomo G.; Jeanne, Olivier.

#### Jensen, Henrik

PD August 1995. TI A Note on Discontinuous Value Functions and Strategies in Affine- Quadratic Differential Games. AU Jensen, Henrik; Lockwood, Ben. AA Jensen: University of Copenhagen. Lockwood: University of Exeter and Centre for Economic Policy Research. SR University of Exeter, Department of Economics Discussion Paper: 95/14; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 8. PR no charge. JE C73, C72. KW Differential Games. Markov-Perfect Equilibrium. Discontinuous Strategies.

AB We present an economic example of an affine-quadratic differential game where in Markov-perfect Nash equilibrium, the value function of a player is discontinuous in the model's parameters, implying that the strategy of that player is also discontinuous, even though the data of the game (state equation and pay-offs) are continuous in the parameters. Sufficient conditions ruling out such discontinuities are presented for the general scalar case.

PD March 1996. TI State Manipulation and Asymptotic Inefficiency in a Dynamic Model of Monetary Policy. AU Jensen, Henrik; Lockwood, Ben. AA Jensen: University of Copenhagen. Lockwood: University of Exeter and Centre for Economic Policy Research. SR University of Exeter, Department of Economics Discussion Paper: 96/05; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 24. PR no charge. JE C73, E52. KW State Manipulation. Asymptotic Inefficiency. Monetary Policy.

**Unemployment Persistence. Dynamic Games.**

**AB** A simple folk theorem of repeated games states that Pareto-efficient outcomes can be achieved in a perfect equilibrium where deviations are punished by a reversion to Nash equilibrium strategies of the associated stage game (Nash threats equilibrium), provided that players are sufficiently patient. In a dynamic version of a well-known monetary policy game we show that such asymptotic efficiency may not be possible, as the presence of a state variable introduces the possibility of state manipulation. Moreover, the lowest inflation rate in Nash threats equilibrium may be increasing as players become more patient.

**Jeong, Byeongju**

**PD** December 1995. **TI** How Important is Uncertainty in Accounting for Difference in Investment and Output Across Countries? **AA** University of Minnesota. **SR** University of Minnesota, Center for Economic Research, Discussion Paper: 287; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 57. **PR** no charge. **JE** O11, E22. **KW** Development. Investment. Uncertainty. Output.

**AB** I offer differences in uncertainty of the industry-level investment environment as an explanation for the observed differences in the investment good price and output level across countries. I present a model economy where the tax rate on industry investment follows a stochastic process. In this environment, a higher level of uncertainty makes investment more inefficient (i.e. increase the expected cost of producing unit of capital), and this is reflected in higher investment good prices. An investigation of industry-level investment data across countries shows that the patterns of investment dynamics (i.e. features or statistics of the investment sequence) in relation to output level are consistent with the implication of the model. I assign model parameter values to countries of different output levels so that the simulated investment sequences from the model mimic the actual investment sequences. I find that uncertainty can account for all of the observed differences in the investment good price, and a significant portion of the differences in the output level across countries. Differences in uncertainty between the US and Ethiopia can account for the difference in the investment good price by a factor of up to 4, and for the difference in the output level by factor of up to 16 between the two countries.

**Jerison, Michael**

**TI** Metonymy and Cross Section Demand. **AU** Evstigneev, Igor V.; Hildenbrand, Werner; Jerison, Michael.

**Jitsuchon, Somchai**

**PD** March 1995. **TI** Precautionary Saving, Growth, and Welfare: A Cross-Country Study. **AU** Jitsuchon, Somchai; Saito, Makoto. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 95/09; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 38. **PR** 20 cents per page Canadian to other than educational institutions. **JE** D91, E21, G12, O57. **KW** Endogenous Growth. Incomplete Markets. Precautionary Saving.

**AB** This paper constructs a simple endogenous growth model

in order to quantitatively analyze the effect of incomplete insurance on saving, growth and welfare in a closed economy, and to examine the growth experience of the OECD countries. In this economy, precautionary saving motivated by uninsured shocks raises growth rates and lowers risk-free returns. Given the wealth level, the welfare of the resident in this economy is measured by the sum of growth rates and risk-free returns, not growth rates alone. This welfare measure can take a negative impact of precautionary saving on welfare into consideration. The paper shows that (i) the heterogeneous performance of growth and saving across the countries reflects different degrees of insurance incompleteness, (ii) since the externality of growth on productivity is very strong in the 1960's, the heavily constrained insurance market itself improves productivity by promoting growth, thereby enhancing welfare, (iii) while the externality of growth becomes weaker in 1980's, the development of insurance markets lowers growth, but can still contribute to welfare.

**John, Christoph**

**TI** A Fiscal Stance in Sweden: A Generational Accounting Perspective. **AU** Hagemann, Robert P.; John, Christoph.

**John, Reinhard**

**PD** October 1995. **TI** A First Order Characterization of Generalized Monotonicity. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/490; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 17. **PR** no charge. **JE** C61, C62, D11. **KW** Weak Axiom. Revealed Preference. **WARP**. Pseudoconcavity. Quasiconcavity.

**AB** It is shown that a well known necessary first order condition for pseudomonotone and quasimonotone functions is also sufficient for these properties provided that the functions are regular. This main result extends recent contributions which can be traced back to Kihlstrom, Mas-Colell and Sonnenschein (1976) as well as to Mitjushin and Polterovich (1978) and provides a solution to an open problem posed by Hildenbrand and Jerison (1989). Its application to gradient functions yields immediately a second order characterization of pseudoconcave and quasiconcave functions which generalizes the one by Diewert, Avriel, and Zang (1981). Furthermore, it implies a stability theorem closely related to Hartman and Olech (1962).

**PD** October 1995. **TI** A Simple Cycle Preserving Extension of a Demand Function. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/493; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 6. **PR** no charge. **JE** D11, C60. **KW** Revealed Preference. **WARP**. **SARP**.

**AB** This note is a short comment on recent contributions by Peters and Wakker who extended classical examples in revealed preference theory by Gale and Shafer to the case of more than three commodities. It is shown that there is a much simpler proof of their results.

**Johnston, Barry R**

**PD** October 1995. **TI** Linkages Between Financial Variables, Financial Sector Reform and Economic Growth and Efficiency. **AU** Johnston, Barry R; Pazarbasioglu, Ceyla. **AA** International Monetary Fund. **SR** International Monetary Fund, Working Paper: 95/103; International

Monetary Fund, 700 19th Street, Washington, DC 20431. PG 21. PR not available. JE E44, G21, G28. KW Financial Reform. International Comparisons.

AB This paper analyzes the different channels through which financial variables and financial sector reform can affect economic growth and efficiency, using panel data for 40 countries which reformed their financial systems. Financial sector reform is hypothesized to affect economic growth and efficiency through three main channels: the real interest rate representing the interest cost of capital, the volume of intermediation, and financial sector efficiency. The results indicate that financial reforms have structural effects; that financial variables and reforms are important determinants of economic performance; that the impact depends on whether countries did or did not face a financial crisis; and that the "quality" of financial sector reform matters.

### Johnstone, Nick

PD July 1995. TI Modelling Passenger Demand, Energy Consumption and Pollution Emissions in the Transport Sector. AA University of Cambridge. SR University of Cambridge, Department of Applied Economics, Amalgamated Series Working Paper: 9527; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 22. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE Q21, Q40, R41. KW Pollution. Energy Policy. Energy Demand. Resource Conservation. Transport Policy.

AB In this paper a model of passenger demand, energy consumption and pollution emissions in the transport sector is described. The Model is designed to serve as a sub-model to the Cambridge Multisectoral Dynamic Model of the United Kingdom economy. It combines the strengths of economic modeling (the determination of passenger demand, ownership rates and key technological characteristics) with the strengths of engineering modeling (the determination of fuel efficiency and pollution emission rates). It is sufficiently detailed to model the effects of vehicle substitution, fuel switching and changes in mode splits and sufficiently flexible to analyze the effects of a broad range of policies in this sector.

PD July 1995. TI An Empirical Analysis of the UK Government's Environmental Policy for the Domestic Sector. AA University of Cambridge. SR University of Cambridge, Department of Applied Economics, Amalgamated Series Working Paper: 9528; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 22. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE Q28, Q48. KW Energy Policy. Energy Markets. Pollution. Resource Conservation. Environmental Policy.

AB In this paper an analysis of the United Kingdom government's environmental policy for the domestic sector is undertaken. Using an integrated economic-engineering model, the effects of the Energy Savings Trust and the imposition of Value-added Tax on domestic fuel in terms of energy consumption and pollution emissions are evaluated. It is found that the initial proposed policy was not sufficiently stringent to meet the government's environmental objectives, and that subsequent events have undermined the government's program even further. Unless alternative policies are introduced, emissions from the domestic sector will play an important role

in jeopardizing the ability of the UK government to meet its international obligations.

### Jones, Stephen R.G

PD April 1995. TI Alternative Measures of Unemployment Based on Flow Data. AU Jones, Stephen R.G.; Riddell, Craig. AA Jones: McMaster University. Riddell: University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 95/14; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 50. PR 20 cents per page Canadian to other than educational institutions. JE C43, C82, E24. KW Unemployment. Unemployment Rate. Labor Force.

AB The categorization of labor market states, and particularly the definition of unemployment, has been much debated on an a priori basis. This paper extends the debate by using a framework which enables the appropriate survey criteria to be determined on empirical grounds. This framework involves examining whether different labor force groups differ in terms of their transition probabilities among labor force states. In particular, we assess whether the marginally attached (those who "want work" but are not actively searching) are behaviorally distinct from those counted as unemployed. We also evaluate whether members of the marginal attachment group differ behaviorally from the balance of those classified as out of the labor force. Our main findings are that members of the marginally attached group are behaviorally distinct from those not in the labor force across almost all demographic groups and regions, and that the marginally attached are typically closer in behavioral terms to the unemployed, especially for men and for those aged over 25. Further, there is a significant degree of heterogeneity within the "marginal" group itself, most notably according to whether the individual is "waiting" or not. Our results suggest that existing criteria for counting "temporary layoffs" and "future job starts" as unemployed -- which exclude those in the "waiting" group of the "marginally attached" -- may be too stringent on behavioral grounds.

### Jurado, Maria Perez

PD not available. TI Purchasing Power Parity: An Empirical Analysis. AU Jurado, Maria Perez; Vega, Juan Luis. AA Banco de Espana. SR Banco de Espana Documento de Trabajo: 9322; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. PG 50. PR not available. JE C12, F31, F41. KW Purchasing Power Parity.

AB Purchasing power parity (PPP) is an equilibrium condition often assumed in both theoretical and practical economic analysis. Empirical testing of PPP has not, however, provided clear evidence that justifies its broad application -- on the contrary, numerous studies have reached negative conclusions regarding its validity. This paper attempts to reconcile the broad use of purchasing power parity and the empirical evidence by using more appropriate methods to test the hypothesis within a multivariate and multi-country setting for Spain, Germany, the United Kingdom, the United States, France and Italy in the period 1970-1992.

TI Is Exchange Rate Risk Higher in the E.R.M. After the Widening of Fluctuation Bands? AU Huertas, Juan Ayuso; Jurado, Maria Perez; Restoy, Fernando.

**TI** Devaluations and Depreciation Expectations in the E.M.S. AU Huertas, Juan Ayuso; Jurado, Maria Perez.

### Juselius, Katarina

**PD** January 1996. **TI** A Structured VAR Under Changing Monetary Policy. **AA** University of Copenhagen. **SR** University of Copenhagen, Institute of Economics, Discussion Paper: 96/02; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. **PG** 47. **PR** not available. **JE** C32, E41, F41. **KW** Capital Controls. Liberalization. VAR. Cointegration. Money Demand.

**AB** The empirical analysis is mainly concerned with the aggregate demand for money relation as part of a small macroeconomic system. Using the theory of cointegrated VAR models for I(2) data the long-run relationships in the data are first investigated, and the maximum likelihood estimates of the corresponding cointegration vectors and common trends are discussed and given an economic interpretation of steady state relations and driving forces. The sample period includes an important regime shift in 1983 when most of the previous controls on the capital movements were lifted. Identifying restrictions are imposed both on the long-run and the short-run structure. The final model describes the dynamic adjustment to short-run changes of the process, to deviations from long-run steady-states, and to several political interventions. It has stable parameters, good statistical properties, and provides some new insights about the effects of capital liberalization on the determination of money, income, prices, and interest rates in a small open economy.

### Kaiser, K.M.J

**PD** July 1995. **TI** Prospects for Reorganisation Within European Bankruptcy Laws. **AA** INSEAD. **SR** INSEAD, Working Papers: 95/94/FIN; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 49. **PR** not available. **JE** G33, K19. **KW** Bankruptcy Laws. European Study.

**AB** This study presents brief summaries and comparisons of the reorganization opportunities within current bankruptcy codes in the U.S., the U.K., France, and Germany. We also discuss the main implications for firms facing financial distress according to the provisions available. The focus is on the usefulness of the applicable legal framework in ameliorating the difficulties facing a distressed debtor; mainly, asymmetries of information, conflicts of interest, distorted incentives, and ability to obtain financing to remain in business. In spite of some efforts to remedy the situation, continental European nations continue to provide mixed opportunities and provisions for resolving the problems facing a viable, liquidity constrained firm. We present some very coarse summary data which support our insights. In the conclusion we discuss very briefly some of the different philosophies and policies behind the different codes, and how these views impact the nature of the codes and the availability of reorganization in the different countries.

### Kalb, Guyonne R.J

**PD** September 1995. **TI** Mixtures of Tails in Clustered Automobile Collision Claims. AU Kalb, Guyonne R.J.; Kofman, Paul; Vorst, Ton C.F. **AA** Kalb and Kofman: Monash University. Vorst: Erasmus University. **SR** Monash University, Department of Econometrics Working Paper: 11/95;

Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 30. **PR** no charge. **JE** C13, C24, G22. **KW** EM-Algorithm. Extreme Value Theory. Size Clusters. Insurance Claims.

**AB** Knowledge of the tail shape of claim distributions provides important actuarial information. This paper discusses how two techniques commonly used in assessing the most appropriate underlying distribution can be usefully combined. The maximum likelihood approach is theoretically appealing since it is preferable to many other estimators in the sense of best asymptotic normality. Likelihood based tests are, however, not always capable of discriminating among non-nested classes of distributions. Extremal value theory offers an attractive tool to overcome this problem. A much larger set of distribution classes is nested by their tail parameter. This paper shows that both estimation strategies can be usefully combined when the data generating process is characterized by strong clustering in time and size. We find that the extreme value theory is a useful starting point in detecting the appropriate distribution class. Once that has been achieved, the likelihood-based EM-algorithm is proposed to capture the clustering phenomena. Clustering is particularly pervasive in actuarial data. An empirical application to a four year data set of Dutch automobile collision claims is therefore used to illustrate the approach.

### Kalyvitis, Sarantis C.

**TI** Efficiency and Expectations Revisited: A Foreign Exchange Market with Bayesian Players. AU Christodoulakis, Nicos M; Kalyvitis, Sarantis C.; Karamouzis, Nicos V.

### Kamecke, Ulrich

**PD** August 1995. **TI** The Role of Tying Contracts for the Optimal Marketing of Durable Products. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/488; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 17. **PR** no charge. **JE** L15, L42. **KW** Tying Contracts. Price Signals. Antitrust Policy.

**AB** Tying contracts are well-known for their anti-competitive potential. This paper questions their negative image by showing that tying contracts can be necessary to implement price signals which overcome problems of asymmetric information in the introductory phase of a new durable product. The argument is applied to two antitrust cases against tying arrangements, the German Meto case and the US American SCM case.

### Kandori, Michihiro

**PD** January 1994. **TI** Private Observation and Communication in Implicit Collusion. AU Kandori, Michihiro; Matsushima, Hitoshi. **AA** Kandori: Princeton University. Matsushima: University of Tsukuba. **SR** Princeton University, Woodrow Wilson School Discussion Paper in Economics: 168; Woodrow Wilson School, Robertson Hall, Princeton University, Princeton, NJ 08544. **PG** 39. **PR** no charge. **JE** C72, C73, D43, D82, L13. **KW** Discounted Repeated Games. Folk Theorem. Imperfect Monitoring. Privately Observed Signals. Communication. Review Strategy.

**AB** We examine the possibility of cooperation in a long term relationship, where agents receive diverse imperfect



information about each other's actions. "Secret price cutting" in the industrial organization literature is a leading example. In a differentiated product market, a firm may not be able to perfectly detect secret price cutting by others, but its own sales may imperfectly indicate what is going on. Since the firm's sales levels are subject to random shocks, they may well end up having diverse expectations: firms with low sales may suspect price cutting while others may not. This causes a serious difficulty in sustaining collusion in such a market. In fact, the characterization of equilibria of this class of games -- discounted repeated games where each player receives a different signal -- has been an open question, despite the large body of literature on repeated games. The present paper shows that communication is a powerful way of resolving possible confusion among the players in this class of games. In particular, we prove folk theorems where players voluntarily communicate what they have observed. Our results thus provide a possible theoretical support for the conventional wisdom that communication is vital in sustaining collusion.

#### Karamouzis, Nicos

TI Efficiency and Expectations Revisited: A Foreign Exchange Market with Bayesian Players. AU Christodoulakis, Nicos M; Kalyvitis, Sarantis C.; Karamouzis, Nicos V.

#### Katsoulacos, Yannis

PD May 1994. TI Environmental Policy Under Oligopoly with Endogenous Market Structure. AU Katsoulacos, Yannis; Xepapadeas, Anastasios. AA Katsoulacos: Athens University of Economics and Business. Xepapadeas: University of Crete. SR Centre for Economic Policy Research, Discussion Paper: 955; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 16. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE D43, D62, H21. KW Externalities. Pigouvian Taxes. Oligopoly. Market Structure.

AB Emission taxes under oligopoly with both fixed number and endogenous market structure (perhaps the most relevant market structures for policy issues) are examined. In the latter case, and contrary to what is expected under imperfect competition, the optimal tax could exceed marginal external damages, which implies that externalities generated by oligopolistic firms could be optimally controlled by over-internalizing environmental damages. Under endogenous market structure, a scheme consisting of a license fee and a second-best under-internalizing emission tax can increase social welfare when compared with the use of a single emission tax exceeding marginal damages.

PD July 1994. TI Evaluating Welfare Losses Under Research and Development Rivalry and Product Differentiation. AU Katsoulacos, Yannis; Ulph, David. AA Katsoulacos: Athens University. Ulph: University College London. SR Centre for Economic Policy Research, Discussion Paper: 992; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 22. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE D43, D61, L13, O33. KW Static Efficiency. Dynamic Efficiency. Non-Tournament Model. Technological Competition. Competition Policy.

AB We evaluate the social welfare loss (WL) that arises in an oligopolistic industry under technological competition and

product differentiation. The main novelty of our approach concerns the decomposition of the WL into "dynamic" losses (from too little cost reduction and an inappropriate number of research laboratories) and "static" losses (from suboptimal output levels and from "rent-seeking" behavior). This allows us to explore the possibility of trade-offs between static and dynamic losses in the effect of competition policy (driving price towards marginal cost) and industrial policy (lengthening patent life). It also allows for an evaluation of the relative significance of these losses. We find that generally there is no trade-off with respect to industrial policy, but a trade-off emerges with respect to competition policy. The dominant components of WL are the dynamic loss from too little cost reduction and, especially, the "rent-seeking" losses. We also find that WL is increasing as regulation pushes price towards marginal cost and is decreasing as patent life increases.

#### Keiding, Hans

PD 1995. TI Allocations Dynamically Implemented in Renegotiation Proof Equilibrium. AA University of Copenhagen. SR University of Copenhagen, Institute of Economics, Discussion Paper: 95/10; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. PG 13. PR not available. JE C62, D51, D61. KW Walras Equilibrium. Dynamic Economies. Nash Equilibrium.

AB An important result of Hurwicz states that a performance correspondence assigning Pareto optimal allocations to exchange equilibria, which is Nash implementable, must be the Walras equilibrium correspondence. In the present paper, this result is extended to economies over time with the associated notion of dynamic implementation. It is shown that if the performance correspondence is implementable in renegotiation proof Nash equilibrium, then it must be the Walras equilibrium correspondence. Some applications of this result are considered.

#### Kelsey, David

PD January 1996. TI On the Measurement of Uncertainty Aversion. AA University of Birmingham. SR University of Birmingham, Department of Economics, Discussion Paper: 96/02; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. PG 21. PR 2 pounds. JE D81, D11. KW Uncertainty-Aversion. Choquet Integral. Multiple Priors. Capacity.

AB This paper proposes a measure of uncertainty-aversion analogous to the Arrow-Pratt measure of risk aversion. We apply it to the multiple priors and non additive probability models of uncertainty. In these models there is no distinction between uncertainty and aversion to it. Hence our theory can also be interpreted as a measure of uncertainty.

#### Kende, M.

PD April 1995. TI Capacity Pricing Under Uncertainty. AU Kende, M.; Roller, Lars-Hendrik. AA INSEAD. SR INSEAD, Working Papers: 95/38/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 20. PR not available. JE D42, D45. KW Monopoly. Dynamic Price Discrimination. Rationing.

AB This paper shows the profit-maximizing pricing strategy of a monopolist selling a fixed capacity before a certain time. The driving example is an airline filling a plane before

departure time. The results show that the fear of rationing taking place at departure induces consumers with a high valuation to pay a premium at an earlier date. This premium varies with the number of potential consumers and the number of remaining seats. Another equilibrium is for the monopolist to simply set prices at a high level and leave with unused capacity. We also analyze the incentives for the monopolist to reduce capacity *ex ante*, in order to increase the likelihood of rationing equilibria to emerge.

PD May 1995. TI Licensing, Software Synergy, and Indirect Network Externalities. AA INSEAD. SR INSEAD, Working Papers: 95/46/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 18. PR not available. JE D42, D45, D62, L63. KW Network Externalities. Monopoly. Licensing. Computers.

AB This paper examines the effectiveness of two common strategies used by a monopoly seller of the hardware component of a system. The first strategy consists of licensing the hardware technology to third-party firms, thus encouraging software firms to develop products for the licensed standard. The second strategy is for the hardware manufacturer to integrate into software production and to unilaterally commit to a high level of compatible software. Both strategies not only increase profits from hardware sales, but also increase consumer surplus by lowering hardware prices and increasing software availability.

PD May 1995. TI Licensing and the Battle Between Standards. AA INSEAD. SR INSEAD, Working Papers: 95/47/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 24. PR not available. JE C72, D45, L63, L86. KW Licensing. Computers. Coordination Game.

AB This paper considers the competition between rival incompatible systems composed of hardware and complementary software, and it models a strategy commonly used by developers of hardware standards, the licensing of technology to third-party firms. Licensing acts as a commitment to lower hardware prices, which increases the willingness of software developers to sink money into development of software for the licensed technology. The resulting increased software availability in turn increases hardware adoption. Results show that licensing is profitable when software development costs are relatively low and when only one firm licenses. Hence there exists a coordination game, the result of which is a mixed-strategy licensing equilibrium, where consumer surplus and total welfare increases, while total profits fall.

### Kesselman, Jonathan R.

PD March 1995. TI Policy Implications of Tax Evasion and the Underground Economy. AA University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 95/10; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 20. PR 20 cents per page Canadian to other than educational institutions. JE H26, H21, H53. KW Underground Economy. Tax Evasion. Tax Compliance. Benefit Fraud.

AB The economic and social significance of the underground economy and tax evasion stem from their impacts on economic efficiency and the distribution of the tax burden. This study

examines these impacts by applying the findings of the conceptual and theoretical economic literature. A distinction is drawn between activities of pure tax evasion and those in the underground economy (UGE). Both involve noncompliance to taxes, but only the latter involves substantive changes in the organization of productive activities. Benefit fraud and its relation to the UGE is further considered. The economic framework includes both choices under risk and the broader impacts of noncompliance on resource allocation and economic efficiency. The private benefits from evasion can be transmitted through the market place to the consumers of goods and services produced in the UGE as well as the producers. Evasion and UGE activity can also affect efficiency and distribution through the compensatory taxation or spending reactions of governments to their revenue shortfalls. This analytical framework is then directed to implications for the conduct of tax enforcement policy as well as the substantive design of tax and transfer policies. Topics considered include penalty rates, tax rates and progressivity, the methods of relieving low-income households from tax, the direct-indirect tax mix, use of excise and property taxes, and the design and enforcement of income-transfer programs.

PD November 1995. TI Payroll Taxes Around the World: Concepts and Practice. AA University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 95/46; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 26. PR 20 cents per page Canadian to other than educational institutions. JE H24, H55. KW Payroll Taxes. Social Security.

AB Payroll taxes are used extensively around the world both for social security finance and for general revenue purposes. This study examines the varying applications of payroll taxes and the structures appropriate to these purposes. It reviews the comparative use of payroll taxes internationally relative to the total tax mix and to GDP, and it reports the rates of social security contributions for employees and employers by country and earnings level. The study then critically considers the classification of these levies between "social security contributions" and "taxes on payroll and workforce." An examination of the payroll-type taxes imposed in selected countries demonstrates numerous anomalies in the existing system for classifying payroll taxes. A revised classification for payroll taxes is suggested that would conform more closely to economically meaningful distinctions between benefit-linked taxes and general-revenue taxes. The study concludes with a review of cross-country differences in the tax treatment of payroll taxes.

### Kessler, Anke S.

PD April 1995. TI The Value of Ignorance. AA University of Bonn. SR Universität Bonn Sonderforschungsbereich, Discussion Paper: A/463; Sonderforschungsbereich 303 an der Universität Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 23. PR no charge. JE D82, D83. KW Information Acquisition. Contracts. Adverse Selection.

AB The objective of this paper is to endogenize the information structure of an agent in a standard model of adverse selection. Before contracting takes place, the agent has the opportunity to choose among different information technologies in order to gather information on the future state of nature. I allow for the possibility that, when using a certain

technology, the agent is ignorant (remains uninformed about the state of nature during the entire game) with some probability. The agent's optimal choice of information structure is derived and it is shown that in the case of 2 states of nature, the possibility of remaining ignorant has a strictly positive strategic value for the agent for a wide range of information technologies. In such a case, there will be no equilibrium in which the agent is perfectly informed even if additional information is costless.

#### Kets De Vries, M.F.R

PD 1995. TI Leaders Who Make a Difference. AA INSEAD. SR INSEAD, Working Papers: 95/24/ENT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 21. PR not available. JE L20, L22. KW Leadership. Management. Firm Organization.

AB This article explores the factors that contribute to building vanguard companies. Effective leadership is considered a determining factor in the creation of high performance organizations. In making this happen, leaders assume two roles: a charismatic role and an instrumental one. Envisioning, empowering and energizing are characteristics of the charismatic role, while in the instrumental role the leader becomes an organizational architect who sets appropriate structures and systems in place. To illustrate the various factors that help create vanguard companies, this article describes three CEOs who have achieved renown for successful management of their respective organizations: Richard Branson, of Virgin, is the helmsman of a rapidly growing entrepreneurial company; Jack Welch, of General Electric, hailed by the press as one of the few leaders able to transform a corporation suffering from organizational arteriosclerosis; and, finally, Percy Barnevik, of ABB, who has risen to the challenge of creating a truly global organization capable of integrating many companies and national cultures. In spite of their disparate histories, these three companies nevertheless share a number of common characteristics. The way these companies have been managed can be seen as a paradigm for the corporate world in the twenty-first century. In this article a number of the characteristics of the high performance organization are identified. For example, the design of high performing organizations tends to be of a more horizontal, rather than a hierarchical nature. As creativity and innovation necessitate transitional space, these kinds of companies do not have the classic command/control structures; instead, the focus is on self-managed teams. The leitmotiv in these companies is that "small is beautiful" as such a design helps develop a sense of ownership and creates accountability. These organizations are also customer-centered, maximizing supplier and customer contact across the organization. They also recognize the importance of speed. Perhaps, most remarkably, these companies have a learning culture, are highly adaptive to change, and value good corporate citizenship.

PD 1995. TI The Anatomy of the Entrepreneur: Clinical Observations. AA INSEAD. SR INSEAD, Working Papers: 95/35/ENT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 48. PR not available. JE M13. KW Entrepreneur. Case Study. Psychoanalysis.

AB In psychoanalytic theory, studies of work behavior have been relatively scarce. Most of the existing literature concerns itself with cases of work inhibition or compulsion. Occasionally, one finds a discussion of people in the creative

professions. No attention has been paid, however, to a major contributor to economic development in society, the entrepreneur. This contrasts sharply with the amount of attention given to entrepreneurs by other disciplines. The object of this study is to better understand the dynamics of entrepreneurship, and in particular, the work behavior of entrepreneurs. First, there is a brief overview of the role of work in psychoanalytic theory. Then a number of factors important to entrepreneurship are reviewed from the perspective of economic, sociological, anthropological, psychological and organizational theory. A case history is presented of one entrepreneur who chose to be treated through psychoanalysis. The intensity of this type of treatment means that continuity in observation is provided. This case study therefore offers a unique insight into the complex "inner theater" of one particular entrepreneur. Previous research on entrepreneurship has identified a number of themes common among some entrepreneurs. In the entrepreneurial theater, a need for control, a sense of distrust, a desire for applause, and resorting to primitive defensive mechanisms such as splitting, projection, denial, and the flight into action ("the manic defense") appear to be common. The behavior of a number of entrepreneurs also seems to have a cyclothymic quality. Moreover, for many of them, their narcissistic development tends to be of a "reactive" nature reflecting difficulties in the regulation of self-esteem. This case history illustrates these themes, and furthermore, shows that running a business is not necessarily a rational process. On the contrary, in many instances, the process seems to be more a question of retrospective "rationalizing" of decisions already made. Finally, inferences are made about the person-organization interface by identifying some of the characteristics of the dramatic organization, a configuration typically created by a number of entrepreneurs.

PD 1995. TI The Downside of Downsizing. AU Kets De Vries, M.F.R.; Balazs, K. AA INSEAD. SR INSEAD, Working Papers: 95/74/ENT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 54. PR not available. JE L22, M12. KW Downsizing. Clinical Approach. Coping Patterns. Psychological Contract.

AB With the help of data obtained from open-ended interviews conducted with the various stakeholders in downsizing operations and applied within a clinical framework, individual reaction patterns are explored in the victims, the survivors (those staying with a company after layoffs,) and the "executioners" (those responsible for the implementation of downsizing.) Special emphasis is given to the reactions of the executives implementing the downsizing operation. Among this group of people, a number of ways of coping can be discerned and described as compulsive/ritualistic, abrasive, dissociative, alexithymic, anhedonic, and depressive. The article ends with a number of practical recommendations about how to facilitate the downsizing process. From the interviews conducted, it appears that downsizing, in the more narrow sense of the word, can be a quite destructive process. Reframing the concept so that downsizing is viewed as a continuous process of corporate transformation and change, a way to plan for the continuity of the organization, seems to be a more constructive approach.

#### Keuschnigg, Christian

PD November 1994. TI Commercial Policy and Dynamic Adjustment Under Monopolistic Competition.

AU Keuschnigg, Christian; Kohler, Wilhelm.  
 AA Keuschnigg: Institute for Advanced Studies. Kohler: University of Essen. SR Centre for Economic Policy Research, Discussion Paper: 1037; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 33. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE D58, F12, F13, F43. KW Trade Liberalization. CGE Modeling. Monopolistic Competition. Intertemporal Investment. Overlapping Generations.

AB We assess some likely consequences of commercial policy in an intertemporal CGE model of an imperfectly competitive, small open economy. Specifically, we combine an overlapping generations model of aggregate savings with capital accumulation by forward-looking investors and production under monopolistic competition and increasing returns to scale. The model replicates Austrian data. We find that unilateral tariff cuts have an expansionary effect resulting both in rationalization of industrial production and in new products supplied by new firms entering the market. Small export subsidies are self financing. The expansionary effects and the welfare increases get magnified under monopolistic competition when compared with a more competitive case. Although all generations are able to participate in the efficiency gains, we note uneven generational gains. Finally, we report large overshooting in the net asset position which we attribute to a life-cycle type savings mechanism.

#### Kiley, Michael

PD December 1994. TI Predicting Tax Rate Changes: Insights From the Permanent Income Hypothesis. AA University of Maryland. SR University of Maryland, Department of Economics, Working Paper: 94/09; University of Maryland, Department of Economics, College Park, MD 20742. PG 22. PR no charge. JE E21, E62. KW Tax Rates. Martingale. Consumption.

AB A large literature demonstrates that changes in aggregate tax rates are basically unpredictable. This has been taken as evidence for the optimal theory of government finance as a positive description of government behavior. We show that the permanent income hypothesis implies that savings should predict income tax changes. The evidence for a range of countries supports this implication, in contradiction to the martingale hypothesis of the optimal theory of government finance.

#### Kim, N.

TI National Brands Versus Private-Labels: An Empirical Study of Competition, Advertising and Collusion. AU Parker, Philip M.; Kim, N.

#### Kim, Se-Jik

PD December 1995. TI A General Equilibrium Approach to Interenterprise Arrears in Transition Economies with Application to Russia. AU Kim, Se-Jik; Kwon, Gooheon. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/145; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 20. PR not available. JE D51, E52, P34, P51. KW Russia. Debt. Economic Reform.

AB This paper presents a general equilibrium model of interenterprise arrears, characterized by n-stage production technology with random productivity shocks. The model shows

that large interenterprise arrears in transition economies may reflect substantial business risks in those countries and that rapid privatization and commercialization may contribute to a huge initial accumulation of trade credits and arrears. The paper also suggests that administrative measures aimed at immediate reduction of IEA such as imposition of prepayments and penalty charges, would not be as effective as partial equilibrium frameworks suggest. Consequently, a fundamental solution should be sought instead in reducing business risks or improving enterprise information. Finally, the paper discusses the relevance of the model to Russian experience in 1993 and 1994.

#### King, Maxwell L.

PD August 1995. TI The Application of the Durbin-Watson Test to the Dynamic Regression Model Under Normal and Non-Normal Errors. AU King, Maxwell L.; Harris, David C. AA Monash University. SR Monash University, Department of Econometrics Working Paper: 6/95; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. PG 25. PR no charge. JE C12, C15, C32. KW Durbin's Tests. Durbin-Watson Test. Point Optimal Test. Monte Carlo Method. Small Disturbance Asymptotics.

AB Until recently, a difficulty with applying the Durbin-Watson (DW) test to the dynamic linear regression model has been the lack of appropriate critical values. Inder (1986) used a modified small-disturbance distribution (SDD) to find approximate critical values. King and Wu (1991) showed that the exact SDD of the DW statistic is equivalent to the distribution of the DW statistic from the regression with the lagged dependent variables replaced by their means. Unfortunately, these means are unknown although they could be estimated by the actual variable values. This provides a justification for using the exact critical values of the DW statistic from the regression with the lagged dependent variables treated as non-stochastic regressors. Extensive Monte Carlo experiments are reported in this paper. They show that this approach leads to reasonably accurate critical values, particularly when two lags of the dependent variable are present. Robustness to non-normality is also investigated.

TI Small-Sample Power of Tests for Inequality Restrictions: The Case of Quarter-Dependent Regressor Errors. AU Wu, Ping; King, Maxwell L.

TI Marginal Likelihood Based Tests of a Subvector of the Parameter Vector of Linear Regression Disturbances. AU Ara, Ismat; King, Maxwell L.

TI A Small Sample Variable Selection Procedure. AU Forbes, Catherine Scipione; King, Maxwell L.; Morgan, Alan.

#### King, Robert

TI Policy, Technology Adoption and Growth. AU Levine, Ross; Easterly, William; King, Robert; Rebelo, Sergio.

#### Kirman, Alan P.

PD October 1995. TI Economies with Interacting Agents. AA G.R.E.Q.A.M., E.H.E.S.S., and Universite d'Aix-Marseille III. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/500; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 37. PR no charge. JE C68, D52, D51.

**KW** Equilibrium. Local/Global Interaction. Communication. Dynamics. Evolution.

**AB** This paper discusses economic models in which agents interact directly with each other rather than through the price system as in the standard general equilibrium model. It is suggested that the relationship between micro and macro behavior is very different than that in the standard model and that the aggregate phenomena that can arise are rich. The models considered include ones with global interaction in which all agents can interact with each other and ones in which agents can only interact with their immediate neighbors. Both static and dynamic models are considered and the latter includes the class of evolutionary economic models. Finally, models in which communication networks evolve are discussed.

#### **Kjerstad, Egil**

**PD** April 1995. **TI** Procurement Auctions with Entry of Bidders. **AU** Kjerstad, Egil; Vagstad, Steiner. **AA** Kjerstad: Foundation for Research in Economics and Business Administration. Vagstad: Norwegian Research Center in Organization and Management. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/481; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 32. **PR** no charge. **JE** D44, D82, L51. **KW** Incentive Contracts. Auctions. Entry. Procurement.

**AB** Laffont and Tirole (1987) study a procurement auction with a fixed number of bidders. They trade off cost efficiency against information rent left with the firms, and prescribe a mechanism involving cost distortions instead of a plain auction. In contrast, we study a situation in which potential suppliers must sink an entry investment before they can participate in the auction. Then, decreasing the firms' rent also weakens their incentive to enter. We show that i) if the auction is designed after the firms have invested, there is a tendency toward underinvestment; ii) the possibility of entry reduces the benefits of incentive contracts; and iii) whenever auctioning incentive contracts reduces entry compared to a plain auction, the procurer would benefit if incentive contracts could be prohibited.

#### **Kneip, Alois**

**PD** May 1995. **TI** Behavioral Heterogeneity and Structural Properties of Aggregate Demand. **AA** Institute de Statistique, CORE, Universite de Louvain, and University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/460; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 35. **PR** no charge. **JE** D11, D12, D31, D33. **KW** Aggregation. Behavioral Heterogeneity. Law of Demand.

**AB** The paper deals with aggregate demand of a large population of households. It is based on an attempt to take aggregation seriously. The approach relies on a distributional property of the population by requiring that demand functions are very different in between households such that households react "heterogeneously" to changes in prices and income. A theoretical framework is developed which does not rely on specific models of individual behavior. Sufficient heterogeneity implies some important structural features of aggregate demand like, for example, the Law of Demand, which cannot be derived from the general microeconomic assumptions on individual

rationality. Emphasis lies upon a discussion of the conceptual approach.

#### **Koehler, A.**

**TI** Estimation and Prediction for a Class of Dynamic Nonlinear Statistical Models. **AU** Ord, J.K.; Koehler, A.; Snyder, R.D.

#### **Koen, Vincent**

**TI** Inflation Dynamics in Kazakhstan. **AU** De Broeck, Mark; De Masi, Paula; Koen, Vincent.

#### **Kofman, Paul**

**TI** Mixtures of Tails in Clustered Automobile Collision Claims. **AU** Kalb, Guyonne R.J.; Kofman, Paul; Vorst, Ton C.F.

**TI** A Threshold Error Correction Model for Intraday Futures and Index Returns. **AU** Martens, Martin; Kofman, Paul; Vorst, Ton C.F.

**PD** November 1995. **TI** Interaction Between the London and New York Stock Markets During Common Trading Hours. **AU** Kofman, Paul; Martens, Martin. **AA** Kofman: Monash University. Martens: Erasmus University. **SR** Monash University, Department of Econometrics Working Paper: 20/95; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 34. **PR** no charge. **JE** C22, G15. **KW** Flexible Fourier Form. Market Volatility. Intraday Seasonality.

**AB** This paper examines the spill-overs in both returns and volatility between the London and New York stock markets during overlapping trading hours. Using high frequency data for the FTSE 100 and the S&P 500 stock index futures, we estimate the seasonal patterns in volatility using the Flexible Fourier Form specification of Gallant (1981). For both markets, volatility is estimated to be higher in the morning and late afternoon, as compared to the rest of the day. The estimated seasonals are used to adjust the returns before conducting the lead-lag analysis. The results indicate that both markets influence each other, although the impact of the US on the UK is clearly stronger.

#### **Kohler, Wilhelm**

**TI** Commercial Policy and Dynamic Adjustment Under Monopolistic Competition. **AU** Keuschnigg, Christian; Kohler, Wilhelm.

#### **Korine, H.**

**PD** 1995. **TI** Procedural Fairness: A Key to Innovation Team Management. **AA** INSEAD. **SR** INSEAD, Working Papers: 95/77/SM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 34. **PR** not available. **JE** M12, M14. **KW** Procedural Fairness. Management. Team Organization.

**AB** This paper introduces the notion of procedural fairness in decision-making as a means for building commitment and understanding in the innovation organization assembled around changing teams. The meaning of procedural fairness in the context of innovation team management is defined and a conceptual rationale is given for why procedural fairness takes on a central role in the team organization. A company case study illustrates how procedural fairness sheds light on managerial questions that the leading approaches to innovation

team management provide only incomplete answers to. The case study provides the basis for a discussion of practical implications.

### Korosi, Gabor

PD August 1995. TI The INITB Macros-User's Guide: A Macro Collection to Write Books Using TEX. AU Korosi, Gabor; Matyas, Laszlo. AA Korosi: LaTrobe University and Hungarian Academy of Sciences. Matyas: Monash University and Budapest University. SR Monash University, Department of Econometrics Working Paper: 9/95; Department of Econometrics, Monash University, Clayton, Victoria 3168. AUSTRALIA. PG 16. PR no charge. JE Z00. KW TEX. Desktop Publishing. Macro Package.

AB The INITB.TEX file consists of a macro collection designed to write books in a form standard to many handbooks using TEX. It has been used to prepare the camera ready hard copy of several books published by Kluwer Academic Publishers, Avebury, etc. It is easy to use and requires only a basic knowledge of TEX.

### Kortian, Tro

PD March 1995. TI Modern Approaches to Asset Price Formation: A Survey of Recent Theoretical Literature. AA Reserve Bank of Australia. SR Reserve Bank of Australia, Research Discussion Paper: 9501; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, SYDNEY NSW 2001. PG 41. PR not available. JE G12, G14. KW Efficient Markets Hypothesis. Asset Pricing.

AB In recent years, there has been much re-assessment and re-evaluation by academic economists of the Efficient Markets Hypothesis. The traditional view, stressing the ability of speculative markets to keep asset prices in line with economic fundamentals, has been challenged by an approach more sympathetic to the role of self-fulfilling expectations, psychology, herd behavior and other seemingly irrational influences on asset prices. Greater appreciation of the institutional features of real world asset markets also distinguishes this modern approach. The paper summarizes this influential and rapidly growing body of theoretical literature on asset price formation.

### Kortum, Samuel

TI Trade in Ideas: Patenting and Productivity in the OECD. AU Eaton, Jonathan; Kortum, Samuel.

### Kovanen, Arto

PD December 1995. TI Capital Account Liberalization in Finland: Analysis of Structural Changes. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/131; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 26. PR not available. JE F21, F31, F32. KW Capital Flows. Finland. Capital Controls. Structural Parameters.

AB This study analyzes structural changes in the determinants of private sector capital flows that resulted from the reforms both in the domestic financial market and in the external capital account of Finland during the 1980s and early 1990s. A Kouri-Porter type of model of the capital account is used which is applicable for a fixed exchange rate expectations, using the recent target zone literature. In order to capture breaks in the estimated structural parameters during the course

of capital account liberalization, a recursive estimation technique is also used. The results show that capital controls were ineffective for policy purposes even before their elimination.

### Krelle, Wilhelm

PD March 1995. TI Should Firms Which Would Go Bankrupt During the Transition Process From a Planned to a Market Economy Be Subsidized? AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/360; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 16. PR no charge. JE P21, P27, E13, E61. KW Transition Process. Planned Economy. Market Economy. Subsidation.

AB A market economy is constructed on the idea that the price system should do the job which no person or no organization could do: to coordinate the economic activities of millions of household and firms in such a way that the households maximize their utility given their budget constraint, and the firms maximize their profit, given the production function and that all markets of commodities and factors of production are cleared. In the present model, optimal policy depends upon the social planner's discount rate. In the low discount rate scenario, the planner provides large subsidies and commits to end those subsidies quickly.

TI Transition from a Planned to a Market Economy: the Interrelation of Subsidization of Firms, Budget Deficit, Unemployment and Inflation. AU Ackermann, Mihael; Krelle, Wilhelm.

### Krishna, Vijay

TI The Folk Theorems for Repeated Games: A Synthesis. AU Benoit, Jean-Pierre; Krishna, Vijay.

### Krueger, Alan B.

TI Economic Growth and the Environment. AU Grossman, Gene M.; Krueger, Alan B.

TI Determinants of Air Pollution in U.S. Counties. AU Grossman, Gene M.; Krueger, Alan B.; Laity, James.

### Kruger, Malte

PD not available. TI Speculation, Hedging and Intermediation in the Foreign Exchange Market. AA Banco de Espana. SR Banco de Espana Documento de Trabajo: 9606; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcalá, 50, 28014 Madrid. PG 89. PR not available. JE F31, F32. KW Speculation. Foreign Exchange. Hedging. European Monetary System.

AB This study attempts to estimate the amount of speculation in foreign exchange markets. Such an estimate is hard to make because it is theoretically as well as empirically difficult to delimit speculation in relation to other activities. In particular, the distinction between speculation and hedging is highly problematic. Notwithstanding these difficulties, it is shown how the composition of gross flows can be used to derive information about speculation and hedging. In an extensive analysis of the interconnections of various foreign exchange market activities it is shown that hedging may generate large short-term capital flows which cannot be easily distinguished from speculation. The size of these flows does not only depend on capital and trade flows but also on net and gross stocks of

foreign assets and liabilities. Based on these findings, an analysis of capital flows between Spain and the rest of the world shows that a larger part than previously believed of the capital outflows during the EMS crisis may have been due to hedging. The second case study which focuses on Japan reveals remarkable changes in the behavior of Japanese and/or foreign investors. What are the implications for economic policy? This study highlights the significance of stocks of open foreign exchange positions of foreigners and residents. If these stocks have been accumulating over many years, any crisis of confidence may trigger large outflows due to hedging, the size of which may by far be more important than the potential amount of speculation. Such hedging activities would hardly be deterred by a Tobin tax or similar devices.

### Krugman, Paul

PD September 1994. TI Globalization and the Inequality of Nations. AU Krugman, Paul; Venables, Anthony J. AA Krugman: Stanford University. Venables: London School of Economics. SR Centre for Economic Policy Research, Discussion Paper: 1015; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 18. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F12, F15, R32. KW Globalization. Integration. Agglomeration.

AB The paper considers a model in which an imperfectly competitive manufacturing sector produces goods which are used both for final consumption and as intermediates. Intermediates usage creates cost and demand linkages between firms and a tendency for manufacturing agglomeration. How does globalization affect the location of manufacturing and the gains from trade? At high transport costs all countries have some manufacturing industry, but when transport costs fall below a critical value a core-periphery pattern forms spontaneously, and nations that find themselves in the periphery suffer a decline in real income. As transport cost continue to fall there comes a second stage of convergence in real incomes, in which the peripheral nations gain and the core nations may well lose.

### Kumar, Manmohan S.

TI International Integration of Equity Markets and Contagion Effects. AU Cashin, Paul; Kumar, Manmohan S.; McDermott, John.

### Kwok, Siu-Kit Claudian

PD September 1995. TI An Aggregate Model of Firm Specific Capital with and without Commitment. AA Union College. SR University of Minnesota, Center for Economic Research, Discussion Paper: 281; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. PG 30. PR no charge. JE E22, E32, J24. KW Asset Specificity. Aggregate Fluctuations.

AB This paper studies the implications of an agency problem on the equilibrium outcome of an intertemporal model. The model considered is a two-period lived overlapping generations model with an aggregate productivity shock. In each generation, a subset of the agents, the entrepreneurs, choose the asset specificity of their projects. An agency problem exists because the entrepreneurs cannot commit to supplying their human capital which is essential to the project. I compare equilibria with and without commitment. The main result is that

in the long run, the equilibrium without commitment has lower asset specificity and per capita output, and the productivity shocks have more lasting effects. However, it need not have larger aggregate fluctuations.

### Kwon, Goohoon

TI A General Equilibrium Approach to Interenterprise Arrears in Transition Economies with Application to Russia. AU Kim, Se-Jik; Kwon, Goohoon.

### Kyei, Alexander

PD December 1995. TI Deposit Protection Arrangements: a Survey. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/134; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 27. PR not available. JE G18, G21, G22, G28. KW Deposit Insurance. Banking. International Comparisons.

AB This paper is a survey of deposit protection arrangements and it compares the key elements of deposit protection schemes around the world. There are more implicit arrangements that guarantee deposits than explicit ones, but there has been a growing tendency since the 1980s for countries to adopt explicit ones largely in response to emerging problems with their financial systems.

### L'Horty, Yannick

TI Une Estimation d'Equation d'Emploi et de Salaire au Niveau Sectoriel Sur Donnees Trimestrielles. AU Laffargue, Jean-Pierre; L'Horty, Yannick.

### La Cour, Lisbeth Funding

PD December 1995. TI A Component-Based Analysis of the Danish Long-Run Money Demand Relation. AA University of Copenhagen. SR University of Copenhagen, Institute of Economics, Discussion Paper: 95/18; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. PG 26. PR not available. JE E41. KW Money Demand. Monetary Aggregates.

AB This paper examines the relation between monetary asset components and some of the variables that traditionally enter into aggregate money demand relations. The analysis is performed on Danish data within the natural framework of a multivariate econometric model. The purpose of the study is to investigate issues in relation to the level and weighting of a monetary aggregate. We show that within this model it is possible to identify monetary aggregates at different levels of aggregation and that for the narrow aggregate (M1) equal weighting of the components are permitted. For the broader aggregates (M2) or (M2-M1) equal weighting is no longer appropriate. These findings are not contradictory to what we would expect from aggregation and index number theory. Finally, an attempt to identify the whole stationary (or long-run) structure of the system is made, and we find a coexistence of a liquid and a less liquid money demand relation pointing towards the possibility of splitting the total money demand relation with respect to different motives for holding money.

### LaFayette, William C.

TI Debt Usage and Mortgage Choice: Sensitivity to Default Insurance Costs. AU Hendershott, Patric H.; LaFayette, William C.

**Laffargue, Jean-Pierre**

PD March 1995. TI Charges Sociales, Qualifications et Emploi. Etude a l'aide d'un Modele d'Equilibre General Calculable de l'Economie Francaise. AA Universite de Paris I. SR CEPREMAP Discussion Paper: 9502; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. PG 53. PR 25 F.F. JE E17, E24, E62. KW Wedge. Employment. Qualification. Social Contributions. Computable General Equilibrium.

AB Since 1960 unemployment has increased much faster for unqualified than for qualified people. Thus we may think that employment policy must focus on the first category of labor. This paper tries to analyze the economic effects, especially on employment, of a decrease in employer's social contributions on unqualified labor. For this purpose we use a model of the French economy which adopts a framework of monopolistic competition, is dynamic, considers that agents optimize over time with rational expectations, and includes a labor market which is modeled in some detail. Of course the results we get depend on the financing of our fiscal measure. These results are the most favorable when the financing consists of reducing transfers to households. They are a little less good when it consists of increasing either social contributions on qualified labor, or VAT. They are still less good if it consists of creating a tax on investment. They become unfavorable if the financing consists of increasing income taxation or the "CSG", because of the distortions take time to take effect, and in the short run these two last financing methods have favorable effects.

PD September 1995. TI Une Estimation d'Equation d'Emploi et de Salaire au Niveau Sectoriel Sur Donnees Trimestrielles. AU Laffargue, Jean-Pierre; L'Horty, Yannick. AA Laffargue: University of Paris I and CEPREMAP. L'Horty: Direction de la Prevision. SR CEPREMAP Discussion Paper: 9511; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. PG 38. PR 25 F.F. JE E24, D43, J64. KW Unemployment. Wedge. Labor Cost. Replacement Ratio.

AB This paper gives estimations of two equations of demand for labor and wage determination on French quarterly data for the main sectors of the economy. These equations rest upon a theoretical model of monopolistic competition between firms and of wage bargaining between firms and trade unions. The estimation methods use recent developments of cointegration theory at the univariate level. Many tests check for the specification of the equations and the stability of the parameters. Employment appears to be rather sticky and presents a positive elasticity in relation to the cost of labor. This cost is more flexible and increases with the replacement ratio and with the wedge, but decreases with the progressivity of this last variable. The effects of technical progress and working hours on these two variable are also investigated.

**Lafontaine, Francine**

PD September 1995. TI Retail Contracting and Costly Monitoring: Theory and Evidence. AU Lafontaine, Francine; Slade, Margaret E. AA Lafontaine: University of Michigan and National Bureau of Economic Research. Slade: University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 95/33; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 12. PR 20 cents per page Canadian to other than educational institutions. JE D23, L22, L81.

KW Agency Costs. Moral Hazard. Contract Choice. Franchising.

AB We reconcile seemingly conflicting hypotheses and evidence that surface in the principal-agent literature. Specifically, we examine the literature that deals with the effect of costly monitoring on retail- organization form. Our principal-agent model of the optimal relationship between up and downstream firms allows the principal to garner two types of imperfect signals of agent effort: sales data and behavior data. The model yields predictions that we confront with the econometric evidence, which comes from both franchising and sales-force-compensation literatures. We find that, when variation in the informativeness and in the cost of increasing the informativeness of both signals is considered, the evidence is consistent with the theory.

PD November 1995. TI Retail Contracting: Theory and Practice. AU Lafontaine, Francine; Slade, Margaret E. AA Lafontaine: University of Michigan. Slade: University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 95/41; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 30. PR 20 cents per page Canadian to other than educational institutions. JE L14, L80, D45. KW Agency Costs. Moral Hazard. Contract Choice. Franchising. Retail- Organizational Form.

AB We examine theories that explain contractual relationships between manufacturers and exclusive retailers and build a model that unifies these theories. One group of theories of retail-organizational form is based on traditional incentive motives. With these models, there exists a tradeoff between providing agents with insurance against risk and incentives to exert effort. A second group is based on strategic motives. With these models, vertical forms of organization affect the outcome of the horizontal game that is played by manufacturers. We construct a model that combines both incentive and strategic motives and derive some comparative statics. We then contrast the predictions from the model with the evidence reported to date in studies of cross sections of standard franchising contracts across industries as well as cross sections of individual contracts from single industries. The role that industry and firm characteristics play in determining organizational form is assessed, and reasons why simple models might fail to explain empirical regularities are considered.

**Laity, James**

TI Determinants of Air Pollution in U.S. Counties. AU Grossman, Gene M.; Krueger, Alan B.; Laity, James.

**Lajeri, F.**

PD April 1996. TI Unexpected Inflation and Bank Stock Returns, The Case of France 1977-1991. AU Lajeri, F.; Dermine, J. AA Lajeri: Koc University. Dermine: INSEAD. SR INSEAD, Working Papers: 96/20/FIN; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 17. PR not available. JE E31, E43, G21. KW Unexpected Inflation. French Banks. Unexpected Interest Rates. Inflation Risk.

AB This paper evaluates the impact of unexpected inflation on the stock returns of a sample of French banks. It offers an empirical test of theories that have predicted an impact of inflation on the stock returns of banks. The paper complements a large literature that has focused exclusively on the impact of



unexpected interest rates. The analysis provides empirical support to the hypothesis that, in periods of volatile inflation, there exists an inflation risk factor which is independent of the well documented interest rate factor.

#### Lal, Rajiv

TI Retail Competition in the Fast-Moving Consumer Goods Industry: The Case of France and the UK. AU Corstjens, Judy; Corstjens, Marcel; Lal, Rajiv.

#### Lambelet, Jean-Christian

PD February 1996. TI Currency Fluctuations vs. Interest and Inflation Differentials: Does the Double Equality Hold? AA Departement d'Econometrie et d'Economie Politique, Ecole des HEC and Universite de Lausanne. SR Universite de Lausanne Cahiers de Recherches Economiques: 9607; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 38. PR no charge. JE E47, E51, F21, F31. KW Exchange Rates. Interest Differentials. Inflation Differentials. Relative PPP.

AB Combining, as it does, three fundamental propositions (uncovered interest rate parity, relative PPP, international equalization of the real return on capital), the double equality is found to hold in the long run with a striking degree of precision and reliability when tested by means of a sample of 18 industrialized OECD countries over the 1976- 1994 period. It must therefore rank as an economic law applicable to a world of floating exchange rates and free circulation of capital. The issue is examined of how long the long run might be in this context. A rough compensation index is calculated to check to what extent each individual currency's tendency to overvaluation (undervaluation) for given inflation differentials is offset by low (high) national interest rates. The most precisely verified part of the double equality is used to estimate a series of equilibrium spot exchange rates. It is argued that knowledge of these equilibrium exchange rates is a necessary condition for rational long-term international investment strategies, although not a sufficient one.

#### Lambert, Peter J.

PD December 1995. TI On the Measurement of Horizontal Inequity. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/135; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 23. PR not available. JE D63, H24. KW Horizontal Equity. Income Taxation.

AB This paper makes a new attack on the old problem of measuring horizontal inequity in the income tax. Local measures of inequality of posttax income among pretax equals are proposed, which reflect alternative value judgments about the nature and magnitude of an inequity. These measures are aggregated into global indices. The welfare gain from eliminating horizontal inequity revenue-neutrally, and the revenue gain from eliminating it welfare-neutrally, in each case preserving the vertical performance of the tax, are captured by these indices. Difficulties of implementation arising from the "identification problem" are discussed. A variation in the methodology validates banding the income data to create "close equals" groups. Simulations show that the banding procedure works well. A range of potentially fruitful applications is discussed.

#### Lapre, M.A

TI Knowledge Driven Quality Improvement. AU Mukherjee, A.S.; Lapre, M.A.; Van Wassenhove, Luk N.

#### Laskar, Daniel

PD August 1995. TI Partial Monetary Unions: an Analysis of the Core of the Game. AA CNRS and CEPREMAP. SR CEPREMAP Discussion Paper: 9512; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. PG 35. PR 25 F.F. JE F33, F42. KW Monetary Unions. Two-Speed Integration. Core of the Game.

AB We determine the conditions under which a partial monetary union, which does not contain all countries, is a solution. The solution concept used corresponds to the core in cooperative game theory. We consider a three-country world, where the countries have different inflationary tendencies, and we focus on issues of credibility and of coordination of monetary policies. Partial monetary unions appear as a compromise between a flexible exchange rate system and a global monetary union, provided both issues of credibility and of coordination are present. The three partial monetary unions have different properties that we make explicit.

#### Leahy, Dermot

PD July 1994. TI Learning by Doing, Precommitment and Infant-Industry Protection. AU Leahy, Dermot; Neary, J. Peter. AA University College Dublin. SR Centre for Economic Policy Research, Discussion Paper: 980; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 24. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F12, L13, L52. KW Strategic Trade Policy. Precommitment. Learning by Doing. Infant Industry. Time Consistency.

AB This paper examines the implications for strategic trade policy of different assumptions about precommitment. In a dynamic oligopoly game with learning by doing, the optimal first-period subsidy is lower if firms cannot precommit to future output than if they can; and is lower still if the government cannot precommit to future subsidies. In the linear case the optimal subsidy is increasing in the rate of learning with precommitment, but decreasing in it if the government cannot precommit. The infant- industry argument is thus reversed in the absence of precommitment, which has important implications for economic policy in dynamic environments.

#### Leamer, Edward E.

PD June 1994. TI The Empirics of Economic Growth in Previously Centrally Planned Economies. AU Leamer, Edward E.; Taylor, Mark P. AA Leamer: University of California, Los Angeles. Taylor: University of Liverpool. SR Centre for Economic Policy Research, Discussion Paper: 976; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 28. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE C11, C31, O47, O57. KW Planned Economies. Privatization. Big Bang. Gradualism. Bayesian Econometrics.

AB We develop a novel Bayesian pooling technique to estimate aggregate production functions for the previously centrally planned economies (PCPEs) of Eastern Europe and for Western economies, as well as for a group of developing countries. This technique adjusts for the low quality of the

PCPE data and also possible differences between PCPE and Western and developing-country technologies. We then apply our estimates to study various privatization scenarios concerning the adoption of Western technology. If the transferability of assets to the new technology is low and Western capital is unavailable, it can be better not to privatize at all, than to have full (big-bang) privatization. Large-scale privatization is also less desirable if Western capital is available for new projects. Thus, it may in some instances be desirable to use Western support to slow the rate of privatization, rather than hasten it.

### Lee, Jong-Wha

TI How Does Foreign Direct Investment Affect Economic Growth? AU Borensztein, Eduardo; De Gregorio, Jose; Lee, Jong-Wha.

PD March 1995. TI Government Interventions and Productivity Growth in Korean Manufacturing Industries. AA Korea University and National Bureau of Economic Research. SR National Bureau of Economic Research, Working Paper: 5060; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 19. PR \$5.00. JE F13, F14. KW Korea. Industrial Policy. Growth. Labor Productivity.

AB This paper investigates the impact of government industrial policy and trade protection of the manufacturing sector in Korea. Empirical results are provided, using 4-period panel data for the years 1963-83, for 38 Korean industries in which trade protection reduced growth rates of labor productivity and total factor productivity, while industrial policies, such as tax incentives and subsidized credit, were not correlated with total factor productivity growth in the promoted sectors. The evidence, thus, implies that less government intervention in trade is linked to higher productivity growth.

### Lehrer, M.

PD January 1995. TI Regional Management and Regional Headquarters in Europe: A Comparison of American and Japanese MNCs. AU Lehrer, M.; Asakawa, K. AA INSEAD. SR INSEAD, Working Papers: 95/01/SM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 24. PR not available. JE F22, L22. KW Multinational Corporations. Regional Management. Comparative Studies.

AB Empirical research on the European operations of American and Japanese MNCs suggested revealed, first, that regional management and regional headquarters in Europe are a less interrelated phenomena than one might suppose, and secondly, that American and Japanese MNCs differ in their organizational responses to regional management challenges. Among American MNCs, the preferred method of handling European issues in the 1990s appeared to be the prudent carving up of regional tasks for delegation to local subsidiaries (especially appointed lead countries), with coordination assured not by central functions, but by formal or informal "councils" periodically bringing top European managers together. Among Japanese MNCs, substantive issues of regional management are usually attended to without altering the formal organizational structure; regional headquarters, where they exist, exercise a largely nominal function.

### Leiderman, Leonardo

PD July 1994. TI Financial Reform in Israel: A Case of

Gradualism. AU Leiderman, Leonardo; Bufman, Gil. AA Leiderman: Tel Aviv University. Bufman: Bank of Israel. SR Centre for Economic Policy Research, Discussion Paper: 997; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 21. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE E52, F41, G28. KW Liberalization. Financial Opening. Financial Reforms. Gradualism.

AB While the Israeli stabilization of 1985 has received significant attention in previous work, much less is known about the process of financial opening and liberalization which began shortly afterwards. In contrast to the disinflation policy of 1985, the process of financial liberalization that started in 1987 proceeded in a slow and gradual mode. No official announcement was made about either the precise policy measures or the timetable for the process. As a result of these and other political economy factors, the process has not been completed and there are no strong incentives for policy-makers to further deepen the reforms at the present time. This paper discusses the main elements of financial liberalization in Israel and draws implications that could be relevant for financial opening policies in other countries.

### Leigh, M.

PD March 1996. TI Rebalancing Portfolios: Some Analytical Results with Applications to Emerging and Mature Markets. AU Leigh, M.; Satchell, S. E. AA Leigh: State Street Global Advisors. Satchell: Trinity College Cambridge. SR University of Cambridge, Discussion Papers in Accounting and Finance: AF23; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 16. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE G11, O16. KW Tactical Asset Allocation. Emerging Markets. Passive Rebalancing. Strategies.

AB This paper investigates some analytic properties of portfolios that are rebalanced to a benchmark. These results are of interest to Tactical Asset Allocation practitioners as they show the extent to which transaction costs impact upon the mean and volatility of returns. Applications to mature and emerging markets and currencies are discussed from the perspective of a UK investor. In the case of emerging markets, passive rebalancing is still likely to be profitable despite the fact that costs are higher. The results also have implications for the optimum periodicity of rebalancing.

### Leisen, Dietmar

PD March 1995. TI Binomial Models for Option Valuation: Examining and Improving Convergence. AU Leisen, Dietmar; Reimer, Matthias. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/309; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 36. PR no charge. JE G13, C63. KW Binomial Model. Option Valuation. Order of Convergence. Convergence Pattern.

AB Binomial models, which rebuild the continuous setup in the limit, serve for approximative valuation of options, especially where formulas cannot be derived mathematically. Even with the valuation of European call options distorting irregularities occur. For this case, sources of convergence patterns are explained. Furthermore, it is proved order of convergence one for the Cox-Ross-Rubinstein model as well as

for the tree parameter selections of Jarrow and Rudd, and Tian. Then, we define new binomial models, where the calculated option prices converge smoothly to the Black-Scholes solution and remarkably, we even achieve order of convergence two with much smaller initial error. Notably, solely the formulas to determine the constant up-and down-factors change. Finally, all three approaches are compared with respect to speed and accuracy calculating relative root-mean-squared error of approximative option values for a sample of randomly selected parameters across a set of refinements. Approximation of American type options with the new models exhibits order of convergence one but smaller initial error than previously existing binomial models.

#### Leleux, B.

TI Trade-Offs in the Venture Capital Decision.  
AU Muzyka, Daniel F.; Birley, S.; Leleux, B.

#### Lepski, O.V

PD March 1995. TI Minimax Nonparametric Hypothesis Testing: The Case of an Inhomogeneous Alternative.  
AU Lepski, O.V.; Spokoiny, Vladimir G. AA Humboldt University. SR Humboldt Universitaet Quantifikation und Simulation Discussion Paper: 44; Humboldt University, SFB 373, Spandauer Str. 1, 10178 Berlin, GERMANY. PG 21. PR not available. JE C12, C14. KW Minimax Testing. Nonparametric Testing.

AB The present paper treats the problem of minimax nonparametric hypothesis testing. The null hypothesis assumes that the function observed with a noise is identically zero (i.e., no signal is present). The alternative is composite and minimax: the function is assumed to be separated away from zero in an integral norm and also to possess some smoothness properties. In this paper we focus on the case of an inhomogeneous alternative corresponding to the situation when the smoothness properties of the functions are measured. The optimal rate of minimax testing is evaluated. Then an optimal test is proposed which essentially uses a pointwise adaptive estimation procedure.

#### Leunig, Timothy

TI Did Smallpox Reduce Height? Stature and the Standard of Living in London, 1770-1873. AU Voth, Hans-Joachim; Leunig, Timothy.

#### Levine, Phillip B.

PD March 1995. TI The Effect of Medicaid Abortion Funding Restrictions on Abortions, Pregnancies, and Births.  
AU Levine, Phillip B.; Trainor, Amy B.; Zimmerman, David J. AA Levine: Wellesley College. Trainor: Hewitt Associates. Zimmerman: Williams College. SR National Bureau of Economic Research, Working Paper: 5066; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 23. PR \$5.00. JE J13, I18. KW Medicaid. Abortion. Pregnancy. Natural Experiment.

AB This paper considers whether state Medicaid abortion funding restrictions affect the likelihood of getting pregnant, having an abortion, and bearing a child. Aggregate, state-level data and microdata from the National Longitudinal Survey of Youth (NLSY) are applied in the empirical work. Changes in laws resulting from Supreme Court decisions create a natural experiment which is utilized to examine fertility behavior. Multivariate models controlling for state and, in the NLSY,

personal characteristics are also estimated using alternative fixed effect specifications. We find that Medicaid funding restrictions are associated with a reduction in both the number of abortions and pregnancies, resulting in either no change or a reduction in births.

#### Levine, Ross

PD May 1994. TI Policy, Technology Adoption and Growth. AU Levine, Ross; Easterly, William; King, Robert; Rebelo, Sergio. AA Levine and Easterly: The World Bank. King: University of Virginia. Rebelo: University of Rochester. SR Centre for Economic Policy Research, Discussion Paper: 957; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 15. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE E62, O11, O41. KW Technology Adoption. Growth. Economic Policy.

AB This paper describes a simple model of technology adoption which combines the two engines of growth emphasized in the recent growth literature: human capital accumulation and technological progress. Our model economy does not create new technologies. It simply adopts those that have been created elsewhere. The accumulation of human capital is closely tied to this adoption process: accumulating human capital simply means learning how to incorporate a new intermediate good into the production process. Since the adoption costs are proportional to the labor force, the model does not display the counterfactual scale effects that are standard in models with endogenous technical progress. We show that our model is compatible with various standard results on the effects of economic policy on the rate of growth.

#### Levy, Dominique

TI The Great Depression: a Paradoxical Event?  
AU Dumenil, Gerard; Levy, Dominique.

#### Licandro, Omar

TI Idiosyncratic Uncertainty, Capacity Utilization and the Business Cycle. AU Fagnart, Jean-Francois; Licandro, Omar; Portier, Franck.

#### Lindbeck, Assar

PD July 1994. TI Price Inertia and Production Lags.  
AU Lindbeck, Assar; Snower, Dennis J. AA Lindbeck: University of Stockholm. Snower: University of London. SR Centre for Economic Policy Research, Discussion Paper: 959; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 18. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE D43, D57, E12, E31. KW Price Rigidities. Price Inertia. Production Lags. New Keynesian Economies.

AB The paper shows how prolonged price inertia can arise in a macroeconomic system in which there are temporary price rigidities as well as production lags in the use of intermediate goods. In this context, changes in product demand -- generated, say, by changes in the money supply -- have long-lasting price and quantity effects. Specifically, a temporary demand shift generates "persistence" in price-quantity decisions, in the sense that the price-quantity effects of this shift persist for long after the shift has disappeared. A permanent demand shift generates "sluggishness" in price-quantity decisions, in the sense that the full price effects of the shift take a long time to appear and that meanwhile quantity effects are present.

PD July 1994. TI Patterns of Unemployment: An Insider-Outsider Analysis. AU Lindbeck, Assar; Snower, Dennis J. AA Lindbeck: University of Stockholm. Snower: University of London. SR Centre for Economic Policy Research, Discussion Paper: 960; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 26. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE J31, J32, J38, J63, J64. KW Unemployment. Insiders. Outsiders. Persistence. Productivity. Labor Force.

AB The paper presents a stochastic insider-outsider model that accounts for the following stylized facts: (1) unemployment rates display a high degree of serial correlation, or "persistence"; (2) the average rate of unemployment has been higher in the United States than in Europe over the 1950s and 1960s, but the opposite has been the case in the 1980s; and (3) the long-run unemployment rate is independent of the level of productivity and the magnitude of the labor force. The model also generates other empirically testable hypotheses, concerning cyclical variations in unemployment persistence, the influence of firing costs and the "discouraged worker" effect on unemployment persistence, and the effect of barriers to the entry of firms on the long-run unemployment rate.

#### Linz, Susan J.

PD May 1995. TI Job Rights in the Soviet and Post-Soviet Economy: An Analysis of Gender Differences. AA Michigan State University. SR Michigan State University, Econometrics and Economic Theory Papers: 9407; Department of Economics, Michigan State University, East Lansing, Michigan 48824. PG 21. PR not available. JE J40, J60, P30. KW Job Rights. Transition Economy. Soviet Labor Market.

AB Results from 3 different surveys are employed to analyze job rights, the institution of guaranteed employment despite individual or firm performance, in the Soviet and post-Soviet economy. Characteristics of job rights in the Soviet economy prior to perestroika, based on data collected in 1983 and 1985 from Soviet emigrants to the United States, are examined in Section 2. Changes in the nature and scope of job rights associated with perestroika and the dissolution of the Soviet Union in 1991 are explored in Section 3. Section 4 presents the results of a 1994 survey of managers and workers in privatized firms in Russia, two years after the initiation of the transition from a planned to a market economy. Section 5 contains a summary of the main findings presented in the paper, as well as concluding remarks.

#### Lippman, S.A.

TI Barriers to Imitation and the Incentive to Innovate. AU Cadot, Olivier; Lippman, S.A.

#### Loch, Christoph H.

PD March 1996. TI Communication and Uncertainty in Concurrent Engineering. AU Loch, Christoph H.; Terwiesch, Christian. AA INSEAD. SR INSEAD, Working Papers: 96/15/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 33. PR not available. JE L23, M11, O32. KW Concurrent Engineering. Time-to-Market. Uncertainty. Communication.

AB We present an analytical model of concurrent engineering, where an upstream and a downstream task are overlapped to minimize time-to-market. The gain from

overlapping activities must be weighed against the delay from engineering changes and rework, which are caused by uncertainty in the development process. Communication reduces the negative effect of rework, with an additional time investment. Our model incorporates uncertainty via the average rate of engineering changes coming from the upstream task, and it incorporates evolution via the change of the modification rate over time. In addition, we model dependence by the impact the modifications impose on the downstream task. The model yields three main results about the connection between uncertainty, communication, and overlap. First, the optimal communication to sustain a given level of concurrency increases with uncertainty, dependence, and slower evolution. The optimal dynamic communication policy increases over the course of the overlapped phase if evolution is slow, and it decreases over time if evolution is fast. Second, dependence and uncertainty reduce the optimal degree of overlapping, while slower evolution may increase or decrease optimal overlap. Third, pre-communication can help to shift the tradeoff between overlap time gains and rework, and it thus results either in both optimal pre-communication and overlap being high, or neither being worthwhile.

TI The Role of Uncertainty Reduction in Concurrent Engineering: An Analytical Model and an Empirical Test. AU Terwiesch, Christian; Loch, Christoph H.

#### Lockwood, Ben

PD October 1994. TI Designing Monetary Policy When Unemployment Exists. AU Lockwood, Ben; Miller, Marcus; Zhang, Lei. AA Lockwood: University of Exeter. Miller and Zhang: Warwick University. SR University of Exeter, Department of Economics Discussion Paper: 94/08; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 42. PR no charge. JE E42, E58, E24. KW Monetary Policy. Unemployment. Delegation.

AB This paper investigates how unemployment persistence affects the various proposals advanced as solutions to the problem of inflation bias (namely delegation, contracts and reputation). First, the contract solution is extended to cover the dynamic case. However, as such contracts are not used in practice, we focus on delegation solution. We find that the delegation of policy to a conservative Central Banker still proves attractive in a setting where unemployment persists; but the degree of conservatism depends critically on how the Central Banker discounts the future. Where the Central Banker discounts the future hardly at all, we find that the appropriate strategy is to delegate to candidates who are more conservative the more persistent the unemployment. Finally, we consider briefly how reputational factors might affect this result.

PD June 1995. TI Commodity Tax Harmonization With Public Goods: An Alternative Perspective. AA University of Exeter. SR University of Exeter, Department of Economics Discussion Paper: 95/03; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 21. PR no charge. JE D61, H21. KW Commodity Tax Reform. Tax Harmonization.

AB This paper investigates whether it is possible to find Pareto-improving commodity tax reforms that harmonize taxes between two countries when governments supply public goods and thus have revenue requirements. It is shown that, with two

goods, and starting from Nash equilibrium taxes, any harmonizing reform will always make both countries worse off (better off) if the imported good is taxed less heavily (more heavily) than the exported good by both countries. An example suggests that harmonization is unlikely to be Pareto-improving if the revenue requirement is high, and the demand for imports is relatively price elastic. An alternative definition of harmonization, difference harmonization, which may yield Pareto-improvements under more general conditions, is proposed.

**TI** A Note on Discontinuous Value Functions and Strategies in Affine- Quadratic Differential Games. **AU** Jensen, Henrik; Lockwood, Ben.

**PD** September 1995. **TI** State Contingent Inflation Contracts and Output Persistence. **AA** University of Exeter, and Centre for Economic Policy Research. **SR** University of Exeter Department of Economics Discussion Paper: 95/13; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. **PG** 7. **PR** no charge. **JE** E61, E42, E32. **KW** Inflation. Persistence. Monetary Policy. Optimal Contracts.

**AB** This note shows that the government can achieve its precommitment outcome in monetary policy when output follows an autoregressive process by offering the central banker a linear inflation contract, where the parameters of the contract depend on lagged output. This note therefore offers an extension of recent results of Walsh to the case of persistence in real economic variables such as output or unemployment.

**TI** State Manipulation and Asymptotic Inefficiency in a Dynamic Model of Monetary Policy. **AU** Jensen, Henrik; Lockwood, Ben.

**PD** May 1996. **TI** Imperfect Competition, the Marginal Cost of Public Funds and Public Goods Supply. **AA** University of Exeter and Centre for Economic Policy Research. **SR** University of Exeter, Department of Economics Discussion Paper: 96/10; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. **PG** 22. **PR** no charge. **JE** H21, H41. **KW** Marginal Cost. Public Funds. Public Goods. Imperfect Competition.

**AB** This paper analyzes the impact of changes in product market competition on the marginal cost of public funds and public goods supply when distortionary commodity taxes are used to raise revenue. First two benchmark results are established: in a very general setting, a change in conduct of firms (as measured by the conjectural variation) has no effect on the marginal cost of public funds or on public good provision if (i) the number of firms is fixed and profits can be taxed at 100%; (ii) there is free entry and an entry tax on firms may be levied. The effects of restricting taxation of profits and ruling out entry taxes are investigated; more competitive behavior of firms does not necessarily lower the marginal cost of public funds and increase public good provision.

### Loeffler, Andras

**TI** Market Demand Functions in the CAPM. **AU** Bottazzi, Jean-Marc; Hens, Thorsten; Loeffler, Andras.

**TI** Existence and Uniqueness of Equilibria in the CAPM with a Riskless Asset. **AU** Hens, Thorsten; Loeffler, Andras.

### Lourenco, Richard De Abreau

**PD** March 1995. **TI** Price Stickiness and Inflation. **AU** Lourenco, Richard De Abreau; Gruen, David. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia, Research Discussion Paper: 9502; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, SYDNEY NSW 2001. **PG** 41. **PR** not available. **JE** E31. **KW** Expected Inflation. Inflation. Price Shocks.

**AB** A recent model of firms' pricing behavior by Laurence Ball and Gregory Mankiw has novel implications for the effect of relative price shocks on inflation. This paper examines these implications and establishes the importance of expected inflation for this story. We derive the model relationship between expected inflation, the economy-wide distribution of industry price changes and actual inflation, and show that both Australian and U.S. industry-price data strongly support this derived relationship. The inflationary impact of relative price shocks depends strongly on expected inflation. When expected inflation is high, a rise in the economy-wide dispersion of shocks is inflationary in the short-run. By contrast, when expected inflation is low, a rise in the dispersion of shocks has minimal impact on inflation. Economy-wide relative price shocks, like terms of trade shocks, are an unavoidable feature of the economic landscape. Their disruptive effect on inflation is minimal, however, when average inflation, and therefore average expected inflation, is kept low.

### Lozano, Alejandro

**TI** Business Implications of Multimedia: The Case of Spain. **AU** Angehrn, Albert A.; Lozano, Alejandro.

### Luelfsmann, Christoph

**TI** The Hold-Up Problem in Government Contracting. **AU** Boes, Dieter; Luelfsmann, Christoph.

### Lusardi, Annamaria

**TI** Household Saving: Micro Theories and Micro Facts. **AU** Browning, Martin; Lusardi, Annamaria.

### Ma, Yue

**PD** May 1994. **TI** Unification and the Policy Predicament in Germany. **AU** Ma, Yue; Hallett, Andrew Hughes; Melitz, Jacques. **AA** Ma and Hallett: University of Strathclyde. **SR** Centre for Economic Policy Research, Discussion Paper: 956; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 25. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F15, R12, O41. **KW** German Unification. Regional Convergence. Wage Subsidies.

**AB** We argue that wages have increased so far ahead of labor productivity in East Germany as to produce a problem that will continue to hound German policy-makers for the next two decades. Despite rapid rates of capital accumulation (around 9 percent) and growth (around 5 percent) in East Germany over the coming ten years, our estimates show that even if wage catch-up decelerates greatly, as long as it continues, the rate of unemployment in the East will still be twice as high as in the West in another ten years. Alternatively, if wage discipline forces the Eastern unemployment rate to come down to the Western level, wage differentials will widen substantially over these next ten years. Thus serious problems loom ahead.

**Machin, Stephen**

PD April 1994. TI Changes in the Relative Demand for Skills in the UK Labour Market. AA University College London. SR Centre for Economic Policy Research, Discussion Paper: 952; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 17. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE J23, J31. KW Employment Composition. Research and Development. Innovation. Computer Use.

AB In this paper I document changes in the distribution of employment in the UK labor market in the 1980s. I use two longitudinal data sources, an industry-level panel data set between 1979 and 1990, and the panel component of the 1984 and 1990 establishment-level Workplace Industrial Relations Surveys. There is evidence of a considerable shift towards the increased relative use of what may be termed more skilled labor (i.e. towards non-manual work, away from manual work and towards more highly-educated labor). This seems to be principally driven by within-industry and establishment factors rather than by industry/establishment shifts in product demand. There is some support for the notion that manual employment-saving changes, perhaps due to the increased use of computer technology and/or innovation, are of empirical importance.

TI Intergenerational Mobility in Britain. AU Dearden, Lorraine; Machin, Stephen; Reed, Howard.

**Maharaj, E. A.**

PD November 1995. TI "Homogeneity of Variance Test" for the Comparison of Two or More Spectra. AU Maharaj, E. A.; Singh, N.; Inder, Brett A. AA Monash University. SR Monash University, Department of Econometrics Working Paper: 19/95; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. PG 37. PR no charge. JE C22, C52. KW Spectral Density. Comparing Spectra. Likelihood Ratio Test.

AB In many real world situations there is a need to compare two or more spectra. Tests to compare spectra already exist in the literature. In this paper we propose a test, based on Bartlett's modification of the likelihood ratio criterion, for comparing two or more spectra. Simulation studies show that for two independent stationary processes, this test is comparable and in some cases better than existing test procedures. The performance of this test for three independent stationary processes is also assessed.

**Mairesse, Jacques**

TI Production Functions: The Search for Identification. AU Griliches, Zvi; Mairesse, Jacques.

**Makridakis, S.**

TI The Accuracy of Extrapolative Forecasting Methods: Additional Empirical Evidence. AU Fildes, R.; Hibon, M.; Makridakis, S.; Meade, N.

PD 1995. TI Evaluating Accuracy (or Error) Measures. AU Makridakis, S.; Hibon, M. AA INSEAD. SR INSEAD, Working Papers: 95/18/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 31. PR not available. JE C52, C53. KW Accuracy Measures. Forecasting. MAPE. Mean Square Error. NAIVE 2.

AB This paper surveys all major accuracy measures found in

the field of forecasting and evaluates them according to two statistical and two user oriented criteria. It is established that all accuracy measures are unique and that no single measure is superior to all others. Instead there are tradeoffs in the various criteria that must be considered when selecting an accuracy measure for reporting the results of forecasting methods and/or comparing the performance of such methods. It is concluded that symmetric MAPE and Mean Square Error are to be preferred for reporting or using the results of a specific forecasting method while the difference between the MAPE of NAIVE 2 minus that of a specific method is a preferable way of evaluating some specific method to some appropriate benchmark.

PD 1995. TI ARMA Models and the Box Jenkins Methodology. AU Makridakis, S.; Hibon, M. AA INSEAD. SR INSEAD, Working Papers: 95/33/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 18. PR not available. JE C22, C53. KW Time Series. ARMA Models. Box-Jenkins. Empirical Studies. M-Competition.

AB See the abstract for Makridakis and Hibon (1995), INSEAD Working Papers, 95/45/TM.

PD 1995. TI The Forthcoming Information Revolution: Its Impact of Society and Firms. AA INSEAD. SR INSEAD, Working Papers: 95/43/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 28. PR not available. JE L15, L22, O31. KW Information Revolution. Inventions. Competition. Market Structure.

AB The impact of the industrial revolutions on all aspects of our society, work and life has, undoubtedly, been substantial. Will all the talk about the information revolution produce similar, far-reaching changes? By examining analogous inventions of the industrial and information revolutions, this paper argues that the latter is on target and that by around the year 2015 it will be at about the same stage of development as the industrial revolution is today. This would mean extensive changes which will affect the way we shop, obtain services, work, educate and entertain ourselves. Furthermore, the impact of information technology on firms and management will be considerable, resulting in flat, horizontal organizations and an intensified competitive market place that spans our entire planet as people will be capable of buying goods and obtaining services from anywhere in the world by using computer networks like Internet.

PD 1995. TI ARMA Models and the Box Jenkins Methodology. AU Makridakis, S.; Hibon, M. AA INSEAD. SR INSEAD, Working Papers: 95/45/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 17. PR not available. JE C22, C53. KW Time Series Forecasting. ARMA Models. Box-Jenkins. Empirical Studies. M-Competition.

AB The purpose of this paper is to study the Box-Jenkins methodology to ARIMA models and determine the reasons why in empirical tests it is found that the post-sample forecasting accuracy of such models is worse than much simpler time series methods. It is concluded that the major problem is the way of making the series stationary in its mean (i.e., the method of differencing) that has been proposed by Box and Jenkins. If alternatives approaches are utilized to remove and extrapolate the trend in the data, ARMA models outperform the corresponding methods involved in the great majority of cases.

In addition it is shown that using ARMA models to seasonally adjust data slightly improves post-sample accuracies while simplifying the use of ARMA models. It is also confirmed that transformations slightly improve post-sample forecasting accuracy, particularly for lone forecasting horizons. Finally, it is demonstrated that AR(1) and AR(2), or their combination, produce as accurate post-sample results as those found through the application of the Box-Jenkins methodology.

**PD** 1995. **TI** Forecasting: Its Role and Value for Planning and Strategy. **AA** INSEAD. **SR** INSEAD, Working Papers: 95/54/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 34. **PR** not available. **JE** C53, E17. **KW** Long-Term. Forecasting. Information Revolution.

**AB** Long-term predictions are indispensable for planning and strategy. Yet little is known about their value, their limitations or the most appropriate way of making and using them. This paper examines these issues and proposes two approaches to long-term forecasting while illustrating their use to planning and strategy. The first approach consists of identifying and extrapolating critical long term trends while assessing their impact on society and firms. The second approach studies the analogy of the industrial and information revolutions and the specific consequences of the five most important inventions of the industrial revolution in terms of the consequences of similar ones of the information revolution. The paper concludes by advocating that much needs to be done to integrate forecasting, on the one hand, and long-term planning and strategy on the other if we want to increase the ability of organizations to anticipate important forthcoming changes, as well as their consequences, and successfully adapt themselves to these changes and the opportunities as well as the dangers associated with them.

### Mamuneas, Theofanis P.

**PD** March 1995. **TI** Public Research and Development Policies and Cost Behavior of the US Manufacturing Industries. **AU** Mamuneas, Theofanis P.; Nadiri, M. Ishaq. **AA** Mamuneas: New York University. Nadiri: New York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5059; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** \$5.00. **JE** O31, O41, H25, H41. **KW** Research and Development. Tax Credit. Public Investment.

**AB** This paper estimates and evaluates the contributions of research and development tax incentives and publicly financed research and development investment policies in promoting growth of output and privately funded research and development investment in US manufacturing industries. Publicly financed research and development induces cost savings but crowds out privately-financed research and development investment while the incremental research and development tax credit and the immediate deductibility provision of research and development expenditures have a significant impact on privately financed research and development investment. The optimal mix of both instruments is an important element for sustaining a balanced growth in output and productivity in the manufacturing sector.

### Mankiw, N. Gregory

**TI** Capital Mobility in Neoclassical Models of Growth. **AU** Barro, Robert J.; Mankiw, N. Gregory; Sala-I-Martin,

Xavier.

### Maravall, Agustin

**PD** not available. **TI** Short-Term Analysis of Macroeconomic Time Series. **AA** Banco de Espana. **SR** Banco de Espana Documento de Trabajo: 9607; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. **PG** 36. **PR** not available. **JE** C32, C53. **KW** Forecasting. Extraction Methods. ARIMA Models. Unobserved Components. Short-Run.

**AB** The paper deals with the statistical treatment of macroeconomic data for short-run economic analysis, monitoring and control. The main applications are short-term forecasting and unobserved components estimation, including trend and cycle estimation, and most often, seasonal adjustment. The paper briefly reviews some of the recent developments in the field, both at the methodological and applied levels. Then, it is argued that a fairly general approach, based on signal extraction methods and ARIMA models, will gradually spread as the dominant methodology. The last section contains a word of caution and illustrates the danger of applying these short-term statistical tools to long-term economic analysis.

**PD** not available. **TI** Estimation Error and the Specification of Unobserved Component Models. **AU** Maravall, Agustin; Planas, Christophe. **AA** Maravall: Banco de Espana. Planas: Eurostat. **SR** Banco de Espana Documento de Trabajo: 9608; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. **PG** 44. **PR** not available. **JE** C32, C51. **KW** Seasonal Adjustment. Unobserved Components. Signal Extraction. ARIMA Models. Identification. Estimation Error.

**AB** The paper deals with the problem of identifying stochastic unobserved two-component models, as in seasonal adjustment or trend-cycle decompositions. Solutions based on the properties of the unobserved component estimation error are considered, and analytical expressions for the variances and covariances of the different types of estimation errors (errors in the final, preliminary, and concurrent estimator and in the forecast) are obtained for any admissible decomposition. These expressions are relatively simple and straightforwardly derived from the ARIMA model for the observed series. It is shown that, in all cases, the estimation error variance is minimized at a canonical decomposition (i.e., at a decomposition with one of the components noninvertible), and a procedure to determine that decomposition is presented. On occasion, however, the most precise final estimator is obtained at a canonical decomposition different from the one that yields the most precise preliminary estimator. Three examples illustrate the results and the computational algorithms. The first and second examples are based on the so-called Structural Time Series Model and ARIMA Model Based approaches, respectively. The third example is a class of models often encountered in actual time series.

**PD** not available. **TI** Unobserved Components in Economic Time Series. **AA** Banco de Espana. **SR** Banco de Espana Documento de Trabajo: 9609; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. **PG** 65. **PR** not available. **JE** C32, C51. **KW** Unobserved Components.

Filters. Seasonal Adjustment. Detrended Data. VAR.

**AB** The paper addresses the situation in which an economic variable, for which a series of observations is available, can be seen as the combination of several unobserved components (UC). UC models have been intensively used in applied economic research; they are often found, for example, in business cycle analysis. UC are also important in short-term policy and monitoring of economic variables, and an important example is seasonal adjustment. UC used in these two fields of applications (applied econometric research and statistical practical applications) often share the same basic structure. This paper deals with UC models displaying that type of structure. First, the limitations of ad hoc fixed filters are briefly discussed; attention is focused on the Hodrick-Prescott filter to detrend a series, and on the X11 filter to seasonally adjust a series. The paper develops then a general set up for a model based approach common to the vast majority of UC model applications. The basic feature is that the components follow linear stochastic processes. The problems of model identification, estimation and forecast of the components, diagnosis, and inference are sequentially addressed. The properties of the estimators (preliminary and historical) and of their associated estimation and forecasting errors are derived. Two examples are discussed: the quarterly series of US GNP (to illustrate business cycle analysis) and the monthly series of the UK money supply (to illustrate seasonal adjustment). The paper contains some implications for applied econometric research. Two important ones are, first, that invertible models, such as AR or VAR models, cannot in general be used to model seasonally adjusted or detrended data. The second one is that to look at the business cycle in detrended series that are seasonally adjusted is a misleading procedure, since detrending plus seasonal adjustment will always induce a non trivial spectral peak for a cyclical frequency.

### Maret, Isabelle

**PD** February 1995. **TI** Joint Distribution of Demand Functions and Price Expectation Functions, and Structural Properties of Market Demand. **AA** Catholic University of Louvain, CORE, and University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/483; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 37. **PR** no charge. **JE** D11, D41, D91. **KW** Household Characteristics. Multi-Period Decisions. Expectation Rule. Demand Aggregation. Substitution Effect.

**AB** Structural properties of the demand of a large population introduced by the aggregation process are studied. The idea is to consider assumptions on the distribution of household characteristics rather than focusing on the modelling of individual behavior. In contrast to the existing literature where the Law of Demand is deduced from distributional requirements, the expectation about future prices are explicitly introduced in the household decision rule. Hence, heterogeneity of household behavior can be interpreted as reflecting heterogeneity in tastes and risk aversion which generates the distribution of expectation functions. It is proved that the introduction of assumptions on the distribution of these expectation rules (in addition to reasonable assumptions on the distribution of demand functions) allow an account of the Law of Demand, independent of strong restrictions on the Jacobian matrix of market demand.

### Marin, Dalia

**PD** March 1995. **TI** Creating Creditworthiness Through Reciprocal Trade. **AU** Marin, Dalia; Schnitzer, Monika. **AA** Marin: Humboldt University, Berlin. Schnitzer: University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/453; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 27. **PR** no charge. **JE** F13, F34, L14. **KW** Countertrade. Sovereign Debt. Creditworthiness.

**AB** In the aftermath of the international debt crisis of the 1980s reciprocal trade arrangements experienced a resurgence. This paper examines how countertrade can help highly indebted countries to finance imports if they are not able to use standard credit arrangements. It compares the credit enforcement mechanisms discussed by the sovereign debt literature with those available under countertrade agreements and shows under what conditions countertrade can increase the debt capacity of highly indebted countries. The implications of our model for the design of optimal countertrade contracts are consistent with empirical evidence from a data set of 230 countertrade transactions.

### Markides, C.C

**PD** 1995. **TI** Corporate Diversification and Organizational Structure: A Resource-Based View. **AU** Markides, C.C.; Williamson, P.J. **AA** Markides: London School of Economics. Williamson: INSEAD. **SR** INSEAD, Working Papers: 95/78/SM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 50. **PR** not available. **JE** M11, L21, L22. **KW** Related Diversification. Strategic Assets. Organizational Structures.

**AB** We argue that the strategy of Related Diversification will enhance performance only when it allows a business to obtain preferential access to "strategic assets" -- those that are valuable, rare, imperfectly tradable and costly to imitate. Even then, the advantage afforded by this access will eventually decay as a result of asset erosion and imitation by single-business rivals. In the long-run, therefore, only accumulated competences that enable the firm to build new strategic assets more quickly and efficiently than competitors will allow the firm to sustain supernormal profits. Both these short- and long-run advantages are conditional, however, on the diversified firm putting organizational structures in place that allow it to share its existing strategic assets and transfer the competence to build new ones between divisions in an efficient manner.

### Martens, Martin

**PD** September 1995. **TI** A Threshold Error Correction Model for Intraday Futures and Index Returns. **AU** Martens, Martin; Kofman, Paul; Vorst, Ton C.F. **AA** Martens and Vorst: Erasmus University. Kofman: Monash University. **SR** Monash University, Department of Econometrics Working Paper: 14/95; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 32. **PR** no charge. **JE** C22, G13, G15. **KW** Threshold Error Correction. Stock Index Futures. Arbitrage.

**AB** Index futures arbitrageurs only enter into the market if the deviation from the arbitrage relation is large enough to compensate for transaction costs and associated interest rate and dividend risks. We estimate the band around the theoretical futures price within which arbitrage is not profitable for most



arbitrageurs, using a threshold autoregression model. Combining these thresholds with an error correction model, we can make a distinction between the effects of arbitrageurs and infrequent trading on index and futures returns.

**TI** Interaction Between the London and New York Stock Markets During Common Trading Hours. AU Kofman, Paul; Martens, Martin.

**Martin, Carmela**

**PD** August 1994. **TI** Trade and Foreign Direct Investment with Central and Eastern Europe: Its Impact on Spain. AU Martin, Carmela; Gual, Jordi. AA Martin: Departamento de Estudios Industriales e Integracion Economica Fundacion. Gual: Universidad de Navarra. **SR** Centre for Economic Policy Research, Discussion Paper: 1006; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 41. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F10, F14, F15, F21. **KW** International Trade. Foreign Investment. Eastern Europe. Spain. European Integration.

**AB** The increased integration of the economies of Central and Eastern Europe with the European Union (EU), as the Europe Agreements are progressively implemented, is projected to have a significant impact on trade flows with Spain, as exports and imports grow very rapidly, albeit starting from a very low base. In particular, the effect will be important for labor-intensive industries, which will confront export displacement in third (EU) markets and some foreign direct investment (FDI) diversion. Trade with Central and Eastern Europe is projected to increase, although it will still be a minor component of total Spanish trade or of EU trade with the Central and East European Countries (CEECs). The product composition of this trade will probably respond to the relative factor endowments underlying current trade patterns. Spain is likely to increase its exports of physical and human capital-intensive goods from these countries to the CEECs. An increase in Spanish imports of labor-intensive goods from these countries is also predicted. The comparatively small part of FDI which has been attracted by relatively low unit labor costs (and tends to be geographically concentrated in the less developed regions of Spain) may be seriously affected by FDI diversion, however, since alternative locations in the CEECs provide lower cost export bases and a significantly better access to the main EU markets.

**Martin, Gael**

**PD** October 1995. **TI** Fractional Cointegration: A Bayesian Approach. AA Monash University. **SR** Monash University, Department of Econometrics Working Paper: 17/95; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 43. **PR** no charge. **JE** C11. **KW** Fractional Cointegration. Markov Chain Monte Carlo Method. Gibbs Sampler.

**AB** The concept of fractional cointegration, whereby deviations from an equilibrium relationship are allowed to follow a fractionally integrated process, has attracted some attention in the literature of late. The long memory aspect of the fractional process is seen as an appropriate characterization of slow reversion to an equilibrium relationship. This paper presents a Bayesian method for conducting inference within the context of a fractional cointegration model. The analysis is based on an approximate likelihood function, which is motivated by the need both to solve a fundamental

identification problem and to produce a posterior density with a relatively simple algebraic form. Inferences are based on the associated marginal posterior densities, estimated by a hybrid of the Gibbs and Metropolis Markov Chain Monte Carlo methods.

**PD** October 1996. **TI** Bayesian Analysis of a Cointegration Model Using Markov Chain Monte Carlo. AA Monash University. **SR** Monash University, Department of Econometrics Working Paper: 16/95; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 44. **PR** no charge. **JE** C11, C15. **KW** Cointegration. Markov Chain Monte Carlo Method. Gibbs Sampler.

**AB** This paper presents a strategy for conducting Bayesian inference within the context of the triangular cointegration model. The numerical analysis is based on a hybrid of the Gibbs and Metropolis Markov Chain Monte Carlo methods. The use of a combination of two Markov Chain algorithms rather than a straight Gibbs Sampler occurs as a consequence of the complications induced by the prior specification. The specific form of the latter is, in turn, required for two purposes: First, in order to offset an identification problem which occurs when the cointegration model is extended to allow for the possibility of no cointegration; Second, in order to allow for an objective prior density on the parameter which determines the existence of cointegration.

**Martinas, Katalin**

**TI** Eco-Thermodynamics: Exergy and Life Cycle Analysis.

**AU** Ayres, Robert U.; Ayres, Leslie W.; Martinas, Katalin

**TI** Eco-Thermodynamics: Exergy and Life Cycle Analysis.

**AU** Ayres, Robert U.; Ayres, Leslie W.; Martinas, Katalin.

**Masson, Paul R.**

**PD** December 1995. **TI** Long-Term Tendencies in Budget Deficits and Debt. AU Masson, Paul R.; Mussa, Mihael. AA International Monetary Fund. **SR** International Monetary Fund, Working Paper: 95/128; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 38. **PR** not available. **JE** H11, H55, H60, J11. **KW** Budget Deficits. Demographic Change. Social Security.

**AB** The last two decades have diverged from earlier experience, with many countries having peacetime deficits. Widespread deficits are shown to be linked to expansion of social programs, unmatched by tax revenue increases. Contributing to this were the output slowdowns in the 1970s, and inflation declines and increases in real interest rates in the 1980s. Anticipated effects on pension and health-care spending of population aging make future prospects worrisome, and urgent measures are needed to limit increases in spending. Developing countries have typically not put in place such generous social programs. In designing pension systems, they need to ensure fiscal sustainability by limiting the scope of public pensions and encouraging funding.

**Mather, Dineli**

**PD** August 1995. **TI** A Computer Simulation of the Spread of Hepatitis C. AA Monash University. **SR** Monash University, Department of Econometrics Working Paper: 8/95; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 14. **PR** no charge. **JE** C15, C49. **KW** Epidemics.

Simulation. Markov Processes.

**AB** The paper presents a generic interactive simulation model for Hepatitis C. The model can be used to predict the long term outcome of existing or custom made cohorts by changing numerous parameters simultaneously. It can also be used to estimate threshold values for parameters and immunization strategies.

### Matousek, Roman

**PD** June 1995. **TI** Non-Performing Loans in the Czech Republic and the Role of the Consolidation Bank: a Financial Analysis. **AA** Institute of Economics, Czech National Bank. **SR** University of Birmingham, Department of Economics, Discussion Paper: 95/20; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. **PG** 19. **PR** 2 pounds. **JE** G21, P43. **KW** Banks. Bad Debts. Czech Republic.

**AB** This paper reviews the method, adopted in the Czech Republic, of collecting non-performing loans in a consolidation bank. Its main focus lies in the financial analysis of the Consolidation Bank. The principal target of this analysis is to reveal the key weaknesses and shortcomings of the above mentioned bank and the consolidation bank solutions to bad debt problems in transition economies. On the basis of this analysis we try to answer questions concerning how the Consolidation Bank should proceed in the near future with respect to dealing with its unfavorable loan portfolio.

### Matsushima, Hitoshi

**TI** Private Observation and Communication in Implicit Collusion. **AU** Kandori, Michihiro; Matsushima, Hitoshi.

### Matyas, Laszlo

**TI** The INITB Macros-User's Guide: A Macro Collection to Write Books Using TEX. **AU** Korosi, Gabor; Matyas, Laszlo.

**TI** Misspecified Heterogeneity in Panel Data Models. **AU** Blanchard, Pierre; Matyas, Laszlo.

### Mavroidis, Petros C.

**TI** Antitrust-based Remedies and Dumping in International Trade. **AU** Hoekman, Bernard M.; Mavroidis, Petros C.

**TI** Linking Competition and Trade Policies in Central and East European Countries. **AU** Hoekman, Bernard M.; Mavroidis, Petros C.

### Maxwell, K.

**PD** 1995. **TI** Software Development Effort Estimation Based on Significant Productivity Factors: General and Company Specific Models. **AU** Maxwell, K.; Van Wassenhove, Luk N.; Dutta, S. **AA** INSEAD. **SR** INSEAD, Working Papers: 95/80/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 30. **PR** not available. **JE** C61, D24. **KW** Software Development. European Space Agency. Effort Estimation.

**AB** The limitations of existing software development effort estimation models suggest the need for the development of simple effort estimation models based on the prior determination of the independent factors which explain the productivity variation of a given database. This paper builds on our previous research which investigated the software productivity of a European Space Agency database consisting

of 108 software development projects. The objectives of this paper were firstly, to develop and evaluate simple empirical effort estimation models which include only those productivity factors found to be significant for these projects; and secondly, to determine if models based on a multi-company database can be successfully used to make effort estimations within a specific company. This was accomplished by developing company specific effort estimation models based on the significant productivity factors of a particular company and by comparing the results with those of the general ESA model. To our knowledge, no other published research has yet developed and analyzed software development effort estimation models in this way. Our study found that the best general effort estimation models were based on the size of the project and the main factors found to effect the productivity of the ESA dataset: application category, language, required software reliability, main storage constraint and the use of modern programming practices or software tools. The best company specific model was based on the two factors which explained the productivity of the individual company. Effort predictions made for the individual company's projects using the general models were a great deal less accurate than the company specific model. However, it is likely that in the absence of enough resources and data for a company to develop its own model, the application of general models may be more accurate than the use of guessing and intuition.

### Mazon, Cristina

**PD** not available. **TI** Is Profitability Related to Market Share? An Intra-Industry Study in Spanish Manufacturing. **AA** Banco de Espana. **SR** Banco de Espana Documento de Trabajo: 9327; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. **PG** 29. **PR** not available. **JE** L13, L21, L60. **KW** Profits. Market Share. Oligopoly.

**AB** This paper presents some evidence on the correlation between profits and market share in Spanish manufacturing firms at the industry level. The interest of this correlation is that a broad class of oligopolistic models is consistent with a positive correlation between these two variables. Establishing the correlation as a stylized fact would be useful as a guide to theoretical work and would allow some insight into market behavior in Spanish manufacturing over the period considered.

### McAndrews, James J.

**PD** February 1995. **TI** Shared Ownership and Pricing in a Network Switch. **AU** McAndrews, James J.; Rob, Rafael. **AA** McAndrews: Federal Reserve Bank of Philadelphia. **Rob**: INSEAD. **SR** INSEAD, Working Papers: 96/07/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 20. **PR** not available. **JE** L11, L13, L41, L43, L89. **KW** ATM Networks. Natural Monopoly. Network Switch.

**AB** We observe that many wholesale switches in ATM networks are jointly owned by their members and that this tends to occur more frequently when the wholesale industry is highly concentrated. We also observe that network switches are "natural monopolies," their costs being largely fixed and their demand exhibiting substantial network externalities. Motivated by these observations, we model the competition for members between wholesale switches and the role joint ownership can play in attracting members. The model analyzes both the adoption decision (which network a bank chooses to join) and

the subsequent pricing of switch and ATM services. We compare competition between two solely owned switches with competition between one solely owned and one jointly owned switch. Our analysis shows that a more concentrated structure results under the latter and that retail prices are higher. This calls into question the leniency of antitrust policy toward jointly owned structures.

#### McCall, Brian P.

TI Is Workers' Compensation Covering Uninsured Medical Costs? Evidence from the "Monday Effect". AU Card, David; McCall, Brian P.

#### McDermott, C.

TI Consumption Smoothing and the Current Account: Evidence for France, 1970-94. AU Agenor, Pierre-Richard; Bismut, Claude; Cashin, Paul; McDermott, C. John.

#### McDermott, John

TI International Integration of Equity Markets and Contagion Effects. AU Cashin, Paul; Kumar, Manmohan S.; McDermott, John.

#### McDonald, Ronald

TI Consumption, Income, and International Capital Market Integration. AU Bayoumi, Tamim A.; McDonald, Ronald.

TI On the Optimality of Consumption Across Canadian Provinces. AU Bayoumi, Tamim A.; McDonald, Ronald.

#### McKittrick, Ross R.

PD August 1995. TI The Econometric Critique of Computable General Equilibrium Modeling: The Role of Parameter Estimation. AA University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 95/27; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 54. PR 20 cents per page Canadian to other than educational institutions. JE C51, D58. KW Computable General Equilibrium. Econometric Methods.

AB The standard calibration method for constructing Computable General Equilibrium (CGE) models has been criticized for using weak parameter selection criteria, intrinsically-biased data and restrictive functional forms. An econometric methodology (Jorgensen, 1984) remedies these weaknesses, but has been used very little to date. The two methods are contrasted, and an exercise in comparative modeling is undertaken to assess the strength of the critique. It is argued that the numerical structure of a CGE model (that is, the parameters used in the cost and utility functions) influence specific sectoral results, but that the macroeconomic effects are largely determined by the overall theoretical framework and the functional forms used. Evidence is provided by developing a new CGE model using the econometric approach, and comparing its performance to a similarly-structured, calibrated CGE model, whose parameterization is significantly different.

#### McLaren, Keith R.

PD March 1995. TI A Parsimonious Autocorrelation Correction for Singular Demand Systems. AA Monash University. SR Monash University, Department of Econometrics Working Paper: 3/95; Department of

Econometrics, Monash University, Clayton, Victoria 3168. AUSTRALIA. PG 10. PR no charge. JE C30, D11. KW Demand Systems. Singular Systems. Autoregressive Errors.

AB The adding up condition of budget share equations is known to imply restrictions for the autoregressive structure of errors. The implications of these restrictions when estimation is in terms of additive normal errors or additive logistic normal errors is clarified, and a byproduct is a specification of the autocorrelation matrix with a structure consistent with the model, but with number of parameters equal to the number of goods. This is more appealing than the scalar diagonal matrix form, but more parsimonious than having the number of parameters proportional to the square of the number of goods.

#### Meade, N.

TI The Accuracy of Extrapolative Forecasting Methods: Additional Empirical Evidence. AU Fildes, R.; Hibon, M.; Makridakis, S.; Meade, N.

#### Meeks, Geoffrey

PD October 1995. TI Profit Forecasts in the Annual Report: the Problem of Economic Assumptions. AA University of Cambridge. SR University of Cambridge, Discussion Papers in Accounting and Finance: AF12; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 15. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE M41, C22. KW Profit Forecasts. Exogenous Influences.

AB It is widely accepted that a major role for financial reporting is to help participants in the financial markets to forecast a company's income. Why then do companies not routinely publish forecasts? It is not because providers and users of accounts are unaccustomed to using forecast data: many forecast variables are already embedded in conventional ex post accounts. A more important obstacle is that any forecast is inevitably contingent on the future "state of the world" which will confront the company on exogenous economic conditions. This paper explores the difficulties this creates and proposes a partial solution.

TI The Financial Effects of Takeover: Accounting Rates of Return and Accounting Regulation. AU Chatterjee, Robin A.; Meeks, Geoffrey.

PD December 1995. TI The Accountant in a Turbulent Age: Accounting Conventions and the Failure of Healthy Companies. AU Meeks, Geoffrey; Meeks, J. G. T. AA University of Cambridge. SR University of Cambridge, Discussion Papers in Accounting and Finance: AF17; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 12. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE G33, D23. KW Failure. Contracts. Accounts.

AB This paper concerns the relationship between the numbers conventionally produced in company accounts and the numbers which would be required from accounts to inform rational economic decisions. It contrasts the legal conditions for insolvency, on the one hand, and the economic conditions for exit, on the other. And it outlines cases where the use of conventional accounts in legal contracts may trigger the failure of companies which on economic criteria should, and on

orthodox natural selection theory would, survive.

PD December 1995. TI The Loser's Curse: Accounting for the Transactions Costs of Takeover and the Distortion of Takeover Motives. AU Meeks, Geoffrey; Meeks, J. G. T. AA University of Cambridge. SR University of Cambridge, Discussion Papers in Accounting and Finance: AF18; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 15. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE G34, M41. KW Takeover. Transactions. Costs.

AB British and American studies of share price movements in the period up to a takeover show that target company shareholders typically experience large gains in wealth but that acquiring company shareholders on average experience little or no gain. The reasons for this asymmetry- and, in particular, for the absence of gains for the shareholders of the companies which initiate the deal-are imperfectly understood. This note suggests one factor contributing to those results. It argues that standard accounting practice in the UK is non-neutral towards "successful" and "unsuccessful" bidders with respect to reporting the transactions costs of bidding. It shows how the prescribed accounting treatment of these costs affects performance measures used in salary contracts as well as in markets for executives and for corporate control. The result is that the managers of bidding companies will have an "artificial" incentive to inflate their bid price or to go ahead with a bid which offers no benefit to their shareholders.

#### Meeks, J. G. T.

TI The Accountant in a Turbulent Age: Accounting Conventions and the Failure of Healthy Companies. AU Meeks, Geoffrey; Meeks, J. G. T.

TI The Loser's Curse: Accounting for the Transactions Costs of Takeover and the Distortion of Takeover Motives. AU Meeks, Geoffrey; Meeks, J. G. T.

#### Melitz, Jacques

TI Unification and the Policy Predicament in Germany. AU Ma, Yue; Hallett, Andrew Hughes; Melitz, Jacques.

PD September 1994. TI The Role of Government Aid to Firms During the Transition to a Market Economy: Russia 1992-94. AU Melitz, Jacques; Waysand, Claire. AA CREST-INSEE. SR Centre for Economic Policy Research, Discussion Paper: 1035; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 27. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE E24, H81, P21. KW Russia. Socialist Economies. Transition. Unemployment. Credit.

AB The paper develops two economic grounds for gradualism in the context of the Russian move towards a market economy: one for the support of output through subsidies, and another for similar support through credit. The first argument relates to the usual case for softening the blow to a sector hit by an adverse, permanent shock. The other argument depends on the absence of a well-functioning capital market. Having presented the two arguments, we discuss the extent to which they justify the course of Russian policy. Essentially we show that the arguments support much less gradualism than actually took place in Russia in 1992 and 1993.

#### Menezes-Filko, Naercio

PD August 1995. TI R&D and Union Bargaining: Evidence From British Companies and Establishments. AU Menezes-Filko, Naercio; Ulph, David; Van Reenen, John. AA Menezes-Filko and Ulph: University College London. Van Reenen: University College London and Institute of Fiscal Studies. SR University College London Discussion Paper: 95/11; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG 44. PR 3 Pounds; checks payable to Department of Economics, University College London. JE O33, J51. KW R&D. Union Bargaining. Selectivity. Research and Development.

AB This paper investigates some micro-econometric models of R&D investment paying particular attention to the role of union bargaining. Recent theoretical work on R&D allows for strategic interactions in the product markets and R&D race. In this more general framework, the negative effect of unions on R&D only holds true when unions bargain only over the wage. When unions bargain over wages and employment but not R&D ("ex post") bargaining R&D may initially rise with union power, before eventually falling. Using establishment and company data sets a simple negative correlation between union power and R&D is uncovered which appears consistent with the notion that union wage gains act as a tax on innovation. However, this association is never significant when human capital and technological opportunity are controlled for. Furthermore, there seems to be some evidence that enterprises with moderate union density have higher R&D intensities although very strong unions have consistently negative effects on R&D. This is broadly consistent with the theoretical model of ex post efficient bargaining.

#### Mertens, Antje

TI Locational Competition versus Cooperation in Labour Markets: An Implicit Contract Reinterpretation. AU Burda, Michael C.; Mertens, Antje.

#### Messerlin, Patrick A.

PD November 11994. TI Central European Countries' Trade Laws in the Light of International Experience. AA Institut d'Etudes Politiques de Paris. SR Centre for Economic Policy Research, Discussion Paper: 1044; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 29. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F13, K33. KW Trade Policy. Central Europe. Contingent Protection.

AB Why did it take only a couple of years for the CECs' ostensibly liberal trade regimes to be so much undermined by piecemeal protectionism? First, CEC trade policies were based on the wrong belief that regional disciplines were a good substitute for non-discriminatory world-wide disciplines. Second, CEC trade laws ignore the potential substitutability between instruments of protection -- an issue particularly acute in the case of contingent protection (antidumping, safeguard, and antisubsidy). If a CEC government wants to adopt contingent protection laws, national laws should do more than incorporate all the GATT provisions. The paper reviews a few suggestions, including the replacement of all the existing contingent protection under the Europe Agreements with the more economically sound Treaty of Rome Articles 91 and 92-93. By signing these batches of the Treaty of Rome, the CECs will become immediate (yet partial) members of the

Community -- an important political step.

### Mestre Ricardo

PD not available. TI A Macroeconomic Evaluation of the Spanish Monetary Policy Transmission Mechanism. AA Banco de Espana. SR Banco de Espana Documento de Trabajo: 9504; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. PG 42. PR not available. JE E32, E52, F31. KW Business Cycle. Exchange Rate. Monetary Policy. Transmission Mechanism. Investment.

AB The monetary policy transmission mechanism is analyzed in this paper with the help of a relatively standard macroeconomic model of the Spanish economy. A temporary increase in policy-set interest rates under different exchange rate regimes is simulated, and a careful decomposition of the channels of transmission of the shock is performed. The exercise highlights the importance of both business investment and the exchange rate in the transmission process. The influence of the business cycle is also taken into consideration.

### Metcalf, David

TI Spanish Pay Setting Institutions and Performance Outcomes. AU Milner, Simon; Metcalf, David.

### Metrick, A.

TI No News Can Be Good News: Irreversible Investment and Strategic Interaction. AU Fatas, A.; Metrick, A.

### Miller, Marcus

TI Designing Monetary Policy When Unemployment Exists. AU Lockwood, Ben; Miller, Marcus; Zhang, Lei.

PD October 1994. TI Optimal Target Zones: How an Exchange Rate Mechanism Can Improve Upon Discretion. AU Miller, Marcus; Zhang, Lei. AA University of Warwick. SR Centre for Economic Policy Research, Discussion Paper: 1031; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 16. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE E42, F31, F33, F42. KW Target Zones. Regulated Brownian Motion. Time Consistent Policy. ERM.

AB Using Krugman's (1991) target zone model, we find an explicit, sub-game perfect solution for a central bank wishing to stabilize the exchange rate given proportional costs of intervention. We demonstrate, however, that precommitment to narrower bands would yield a welfare gain -- which provides a theoretical rationale for an Exchange Mechanism (ERM). Numerical simulations suggest that the optimal currency band with precommitment via an ERM is only half as wide as that under discretion.

### Milner, Simon

PD not available. TI Spanish Pay Setting Institutions and Performance Outcomes. AU Milner, Simon; Metcalf, David. AA Banco de Espana. SR Banco de Espana Documento de Trabajo: 9420; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. PG 100. PR not available. JE J31, J51. KW Collective Bargaining. Trade unions. Wage Flexibility. Minimum Wage.

AB Links between Spanish industrial relations institutions

and performance outcomes are examined. Part I considers changes in various institutions since the end of the Franco period: the structure of collective bargaining; trade union organization; the activities and structure of management; the scope of bargaining; and the extent of informal bargaining. It goes on to see how such changes have affected macroeconomic performance. Part II examines the flexibility of the industrial wage structure. It considers how the relative job performance by sector is influenced by the flexibility in the pay structure and by minimum wage legislation.

### Mollgaard, H. Peter

PD August 1995. TI Dynamic Bargaining in a Market With Multiple Encounters and a Time Constraint. AA University of Aarhus. SR University of Aarhus, Department of Economics, Memo: 1995/11; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK/8000 Aarhus C, DENMARK. PG 19. PR no charge. JE C78. KW Bargaining. Markets. Random Matching. Efficiency.

AB Most bargaining models of markets have agents trade an indivisible good only once. The quantity traded is determined by the number of agents. I retain the assumption of indivisibility but let agents trade with downward sloping net-demand curves in multiple periods. Matching is random in every period. There is a fixed time constraint. Agents trade in order to extract all possible gains from trade before the market closes. The Markov perfect equilibrium of the model is found. It is shown that it may well differ from the Walrasian equilibrium and that it need not be efficient.

PD August 1995. TI A Squeezer Round the Corner? Self-Regulation and Forward Markets. AA University of Aarhus. SR University of Aarhus, Department of Economics, Memo: 1995/12; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK/8000 Aarhus C, DENMARK. PG 31. PR no charge. JE L12, L13, L71. KW Squeeze. Forward Trading. Self-Regulation. Oligopoly. Repeated Game.

AB Squeezes are registered in the forward market for Brent crude oil. The squeezer accumulates forward contracts and creates artificial demand. This causes the price to surge and introduces uncertainty about the market outcome. Squeezes therefore render the market institution less palatable to other market participants. Producers may have a long term interest in keeping market clearing smooth, e.g. by supplying stocks to squeezed traders. The extent to which such self-regulation should be carried out is analyzed in the context of a repeated game. Unless the probability of a squeeze is very small, self-regulation should be possible.

### Morgan, Alan

TI A Small Sample Variable Selection Procedure. AU Forbes, Catherine Scipione; King, Maxwell L.; Morgan, Alan.

### Morgenthaler, J.D

TI Optimum Alphabetic Binary Trees. AU Hu, T.C.; Morgenthaler, J.D.

### Muhleisen, Martin

PD November 1995. TI Monetary Policy and Inflation Indicators for Finland. AA International Monetary Fund.

SR International Monetary Fund, Working Paper: 95/115; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 30. PR not available. JE C13, O11, C43, E52. KW Price Index. Finland. Monetary Policy.

AB This paper is assessing various leading indicators of inflation in Finland and their practical role in framework for Finnish monetary policy under a floating exchange rate. Following Friedman (1990) who argued for the explicit inclusion of a broad set of economic indicators in the monetary decision process, absent a practical intermediate target, this paper tests a large number of indicators for their relevance in determining future inflationary pressure and guiding monetary policy. The robustness of the indicators is examined under different models, guided by alternative views of the monetary transmission process. The results indicate that a monetary conditions index, stumpage prices, and real and nominal effective exchange rates are among the strongest indicators, affecting inflation with a lag of between 4 and 11 quarters.

### Mukherjee, A.S

PD May 1995. TI Knowledge Driven Quality Improvement. AU Mukherjee, A.S.; Lapre, M.A.; Van Wassenhove, Luk N. AA Mukherjee: Arthur D. Little, Boston. Lapre and Van Wassenhove: INSEAD. SR INSEAD, Working Papers: 95/48/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 32. PR not available. JE L15, M12. KW Organizational Learning. Quality Improvement. Technological Knowledge. Management.

AB Although the literature has suggested that both organizational learning and quality improvement are crucial for competition, the link between the two is ill-understood. We explore this link by studying 62 quality improvement projects undertaken in one factory over a decade. A factor analysis identifies three learning constructs that characterized the learning process: scope, conceptual learning and operational learning. We use OLS regressions to study the impact of these learning constructs on project performance. We offer explanations based on the organizational learning literature. The mix of conceptual and operational learning is found to play a crucial role in consistently improving quality, creating new technological knowledge, and changing factory personnel's attention. We formulate managerial recommendations and questions for future research.

### Mullineux, Andy

TI Financial Innovation, Monetary Aggregates and Monetary Policy in the UK and Germany. AU Gaab, Werner; Mullineux, Andy.

PD May 1995. TI Financial Innovation, Monetary Aggregates and Monetary Policy in Switzerland and the UK. AA University of Birmingham. SR University of Birmingham, Department of Economics, Discussion Paper: 95/18; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. PG 35. PR 2 pounds. JE E42, E52. KW Monetary Aggregation. Monetary Policy. Financial Innovation.

AB The role of monetary aggregates in monetary policy in the UK and Switzerland is reviewed. The construction of Divisia monetary indices is then discussed and their potential usefulness as alternatives to traditional (simple-sum) monetary aggregates is considered. Finally, empirical evidence concerning the usefulness of various simple-sum and Divisia

monetary aggregates in Switzerland and the UK is surveyed. It is concluded that there is accumulating evidence in both countries that Divisia indices are useful indicators of economic conditions, and especially inflation. The targeting of Divisia monetary indices is not, however, advocated.

### Murota, Kazuo

PD January 1995. TI Valuated Matroid Intersection, II: Algorithms. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: 95838; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 20. PR no charge. JE C44, C61. KW Assignment Problem. Valuated Matroid. Combinatorial Optimization.

AB Based on the optimality criteria established in Part I, we show a primal-type cycle-canceling algorithm and a primal-dual-type augmenting algorithm for the valuated independent assignment problem. The proposed algorithms generalize the previous algorithms for the independent assignment problem as well as for the weighted matroid intersection problem, including those due to Lawler (1975), Iri-Tomizawa (1976), Frank (1981), and Zimmermann (1992).

PD January 1995. TI Fenchel-Type Duality for Matroid Valuations. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: 95839; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 25. PR no charge. JE C44, C61. KW Matroid Intersection Problem. Fenchel Duality. Convex Analysis. Combinatorial Optimization.

AB The weighted matroid intersection problem has recently been extended to the valuated matroid intersection problem. This paper develops a Fenchel-type duality theory related to this problem. By way of a concave extension of matroid valuations to the base polytopes, the dual problem is derived naturally. This generalizes the well-known primal-dual pair for the ordinary weighted matroid intersection problem. A Fenchel-type min-max theorem and a discrete separation theorem are given. Furthermore, the subdifferentials of matroid valuations are investigated.

PD February 1995. TI On Exchange Axioms for Valuated Matroids and Valuated Delta-Matroids. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: 95841; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 12. PR no charge. JE C44, C61. KW Valuated Matroid. Valuated Delta-Matroid. Exchange Axioms.

AB Two equivalent axioms are given for valuations of a matroid. Let there be matroid on a finite set with the family of bases. For a given function equivalent conditions are given. A similar result is obtained for valuations of a delta-matroid.

PD February 1995. TI Matroid Valuation on Independent Sets. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: 95842; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 21. PR no charge. JE C44, C61. KW Valuated Matroid. Truncation. Exchange Axioms.

AB Recently, Dress and Wenzel introduced the concept of valuated matroid in terms of a quantitative extension of the

basis exchange axiom for matroids. This paper gives two sets of cryptomorphically equivalent axioms of valuated matroids in terms of a function defined on the family of the independent sets of the underlying matroid.

**PD** March 1995. **TI** Submodular Flow Problem with a Nonseparable Cost Function. **AA** University of Bonn. **SR** Universität Bonn Sonderforschungsbereich, Discussion Paper: 95843; Sonderforschungsbereich 303 an der Universität Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 25. **PR** no charge. **JE** C44, C61. **KW** Submodular Flow. Valuated Matroid. Negative Cycle. Combinatorial Optimization.

**AB** The submodular flow problem with a nonseparable cost function is considered. The objective function is assumed to enjoy a variant of Steinitz's exchange property, which is satisfied, e.g., by a separable concave function on the base polyhedron and by a matroid valuation (in the sense of Dress and Wenzel). Two optimality criteria are established, one in terms of potentials and the other in terms of negative cycles in an auxiliary graph. These are natural extensions of the previous results for the submodular flow problem (with a linear or separable convex cost function) and for the valuated matroid intersection problem.

**PD** March 1995. **TI** Mathematical Mechanism Underlying Ecolon-Mode and Shear-Band Formations. **AU** Murota, Kazuo; Ikeda, Kiyohiro. **AA** Murota: University of Bonn. **Ikeda:** Tohoku University. **SR** Universität Bonn Sonderforschungsbereich, Discussion Paper: 95844; Sonderforschungsbereich 303 an der Universität Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 34. **PR** no charge. **JE** C44, C61. **KW** Echelon Mode. Cylindrical Domain. Group Theory. Shear Band. Successive Bifurcation.

**AB** This paper presents a theory on the underlying mathematical mechanism of the echelon mode (a series of parallel short wrinkles that look like a flight of stairs or wild geese arranged in formation) which has been observed ubiquitously with uniform materials, such as cylindrical soil specimens undergoing triaxial compression tests, but which has long denied successful numerical simulations. It is shown by means of the group-theoretic bifurcation theory that the echelon mode formation can be explained as a recursive (secondary, tertiary, ...) symmetry-breaking bifurcation if  $O(2) \times O(2)$  is chosen as the underlying symmetry to model the local uniformity of materials. This implies, for example, that the use of periodic boundaries is essential to successfully realize the oblique stripe patterns and the subsequent echelon mode formation in numerical simulations.

**PD** June 1995. **TI** The Algorithms for Valuated Delta-Matroids. **AA** University of Bonn. **SR** Universität Bonn Sonderforschungsbereich, Discussion Paper: 95846; Sonderforschungsbereich 303 an der Universität Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 6. **PR** no charge. **JE** C44, C61. **KW** Valuated Delta-Matroid. Concavity. Degree of Subdeterminant.

**AB** Two algorithms are proposed for computing the maximum degree of a principal minor of specified order of a skew-symmetric rational function matrix. The algorithms are developed in the framework of valuated delta-matroid of Dress and Wenzel, and are valid for valuated delta-matroids in general.

**PD** June 1995. **TI** Convexity and Steinitz's Exchange

Property. **AA** University of Bonn. **SR** Universität Bonn Sonderforschungsbereich, Discussion Paper: 95848; Sonderforschungsbereich 303 an der Universität Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 43. **PR** no charge. **JE** C44, C61. **KW** Combinatorial Optimization. Exchange Property. Convex Analysis. Valuated Matroid.

**AB** A theory of "convex analysis" is developed for functions defined on integer lattice points. We investigate the class of functions which enjoy a variant of Steinitz's exchange property. It includes linear functions on matroids, valuations on matroids (in the sense of Dress and Wenzel), and separable concave functions on the integral base polytope of submodular systems. It is shown that a function has the Steinitz exchange property if and only if it can be extended to a concave function such that the maximizers of (the concave function plus any linear function) form an integral base polytope. A Fenchel-type min-max theorem and discrete separation theorems are given, which contain (e.g., Frank's discrete separation theorem for submodular functions) Edmonds' intersection theorem, Fujishige's Fenchel-type min-max theorem for submodular functions, and also Frank's weight splitting theorem for weighted matroid intersection.

**PD** August 1995. **TI** Characterizing a Valuated Delta-Matroid as a Family of Delta-Matroids. **AA** University of Bonn. **SR** Universität Bonn Sonderforschungsbereich, Discussion Paper: 95849; Sonderforschungsbereich 303 an der Universität Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 16. **PR** no charge. **JE** C44, C61. **KW** Valuated Delta-Matroid. Exchange Axiom. Bisubmodularity.

**AB** Two characterizations are given for a valuated delta-matroid. It is shown that a certain function is a valuation if and only if its conjugate function is "locally bisubmodular" at each point.

**PD** January 1996. **TI** Valuated Matroid Intersection, I: Optimality Criteria. **AA** University of Bonn. **SR** Universität Bonn Sonderforschungsbereich, Discussion Paper: 95837; Sonderforschungsbereich 303 an der Universität Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 21. **PR** no charge. **JE** C44, C61. **KW** Assignment Problem. Valuated Matroid. Combinatorial Optimization.

**AB** The independent assignment problem (or the weighted matroid intersection problem) is extended using Dress-Wenzel's matroid valuations, which are attached to the vertex set of the underlying bipartite graph as an additional weighting. As natural extensions of the previous results for the independent assignment problem, two optimality criteria are established; one in terms of potentials and the other in terms of negative cycles in an auxiliary graph.

#### Mussa, Mihael

**TI** Long-Term Tendencies in Budget Deficits and Debt. **AU** Masson, Paul R.; Mussa, Mihael.

#### Muzyka, Daniel F.

**PD** 1995. **TI** Entrepreneurial Transformation: A Descriptive Theory. **AU** Muzyka, Daniel F.; De Koning, Alice J.; Churchill, N. **AA** INSEAD. **SR** INSEAD, Working Papers: 95/39/ENT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 14.

PR not available. JE L21, M13, M14.  
KW Entrepreneurial Transformation. Firm Operations.

AB This paper is an initial attempt to develop a descriptive theory of the process of transforming a company from a traditional corporation to an entrepreneurial one. There has been considerable outcry by those within and without corporations for a change the way corporations operate and considerable effort is being put into their transformation. In both the cry and the corporate response thereto, there has been an increasing focus on making organizations more "entrepreneurial", that is, opportunity-seeking. We have identified a small group of companies which have recognized the need for transformation, but rather than simply correcting their problems they have set their goal of creating companies that are better able to adapt and seize opportunity on a sustained basis. Beginning with a summary of our understanding of the entrepreneurial corporation and the transformation process, we develop a series of propositions which describe the end state that is being sought, the characteristics, processes and people involved in these entrepreneurial transformations, and we close by showing how that, when once transformed, the organizations become self-regenerating.

TI Finding the High Flying Entrepreneurs: A Cautionary Tale. AU Birley, S.; Muzyka, Daniel F.; Dove, C.; Rossell, G.

PD 1995. TI Trade-Offs in the Venture Capital Decision. AU Muzyka, Daniel F.; Birley, S.; Leleux, B. AA Muzyka: INSEAD. Birley: Imperial College of Science, Technology and Medicine. Leleux: Babson College. SR INSEAD, Working Papers: 95/62/ENT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 20. PR not available. JE G24, M13. KW Venture Capital. European Study. Risky Investment.

AB By their very nature, new ventures carry high levels of risk for those involved. Moreover, the more complex the business and the larger the levels of investment required, the greater are likely to be the chances of failure. Yet it is in these circumstances that entrepreneurs are less likely to be able to fund the business from their own or their family resources. As a result, they seek external investors, usually from within the Venture Capital community. Here, the people with whom they are dealing are unlikely to be able to draw upon personal knowledge of the entrepreneurial team or upon the business "track record", so they must rely upon other criteria to inform their decision. Several studies of venture capital investment criteria have been carried out previously, often utilizing traditional Likert-scaled survey methods. They have produced some general findings which indicate that the "human factor" is of utmost importance. However, virtually all of these studies have been undertaken with U.S. base venture capitalists. In addition, they have generally been exploratory and have assumed a single hierarchy of decision criteria in all cases and across all venture capitalists. We do not accept that this latter is a valid assumption. Therefore, this research aims to test this presumption by investigating the "trade offs" made by venture capitalists in Europe.

TI The Convergence of Good Ideas: How do Serial Entrepreneurs Recognize Innovative Business Ideas? AU De Koning, Alice J.; Muzyka, Daniel F.

Myles, Gareth D.

PD May 1995. TI Tax Evasion. Social Customs and Optimal Auditing. AU Myles, Gareth D.; Naylor, Robin A. AA Myles: University of Exeter. Naylor: University of Warwick. SR University of Exeter, Department of Economics Discussion Paper: 95/08; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 20. PR no charge. JE D82, H26. KW Tax Evasion. Social Customs.

AB The optimal audit policy is analyzed for an independent revenue service when a social custom exists that rewards honest tax-paying. The implication of the existence of the social custom is that in equilibrium the income level of a taxpayer cannot always be inferred exactly from their report. The structure of the optimal audit policy is determined both for a fixed (report-invariant) audit probability and for when the audit it is shown that an interior solution exists to the decision problem of the revenue service and comparative statics results are given. When the audit probability can vary, the audit function is proved to be a decreasing function of the income report which reaches zero at the highest income report of a tax evader. Increases in the fine for evading and in the tax rate raise the optimal audit probability.

PD September 1995. TI Economic Mismeasurement and the Bias in Policy Choice. AA University of Exeter. SR University of Exeter, Department of Economics Discussion Paper: 95/11; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 28. PR no charge. JE E61, H21, H26. KW Mismeasurement. Policy Choice. Bias.

AB The level of economic activity is never measured perfectly because of problems of definition, inaccuracies in data collection and the existence of the hidden economy. Such mismeasurement implies that government policies based on official statistics can be optimal only by chance. The analysis formalizes this observation in a two-sector economy and attempts to quantify the direction and extent of the bias introduced into policy by the failure to account for the true size of the economy.

PD November 1995. TI Taxation and the Control of International Oligopoly. AA University of Exeter. SR University of Exeter, Department of Economics Discussion Paper: 95/06; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 18. PR no charge. JE D43, F12, H21. KW Taxation. International Oligopoly. First-Best. Constrained Second Best.

AB The paper shows how the differing incidence of specific and ad valorem taxation in imperfectly competitive markets can be exploited to control international oligopoly. If countries act cooperatively, the tax instruments used in combination achieve the same outcome, either the first-best or the constrained second-best, as direct production control. When a single country regulates the oligopoly, circumstances are shown to exist in which taxation is superior to production control.

Nadiri, M. Ishaq

TI Public Research and Development Policies and Cost Behavior of the US Manufacturing Industries. AU Mamuneas, Theofanis P.; Nadiri, M. Ishaq.



**Nanda, A.**

**PD** 1995. **TI** Corporate Restructuring: How Joint Ventures Can Help Ease the Pain. **AU** Nanda, A.; Williamson, P.J. **AA** Nanda: Harvard University. Williamson: INSEAD. **SR** INSEAD, Working Papers: 95/82/EAC; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 20. **PR** not available. **JE** L14, L15, M10. **KW** Joint Ventures. Corporate Restructuring.

**AB** This paper explores the use of joint ventures as a potentially powerful tool to facilitate corporate restructuring. It argues that forming a joint venture with a prospective future owner who will buy out the business following a transition period has important advantages for both parties, especially where the corporate challenge is to exit a non-core business whose main value lies in under-utilized intangible assets like brands, distribution relationships, business systems and experienced teams. The joint venture process can help the seller avoid the destructive impact of putting a business up for auction and gain some of its future upside potential in a higher, final exit price once the potential for performance improvement has been demonstrated. For the prospective buyer it proves the opportunity to observe the business as an "insider" before making final commitments on acquisition terms, time to disentangle the business unit from its former parent, and the opportunity to avail itself of continued managerial and technical input from the restructurer during the process of hand-over. This joint venture solution does, however, carry the penalty of higher administrative costs. In order to minimize this burden and to reflect their transitory nature, restructuring joint ventures need to be structured and managed differently from their more traditional joint venture cousins.

**PD** March 1995. **TI** Corporate Restructuring Through Transitory Joint Ventures. **AU** Nanda, A.; Williamson, P.J. **AA** Nanda: Harvard University. Williamson: INSEAD. **SR** INSEAD, Working Papers: 95/81/EAC; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 36. **PR** not available. **JE** L14, L15, M10. **KW** Joint Ventures. Corporate Restructuring. Adverse Selection. Case Studies.

**AB** This paper proposes that joint ventures can be used as transitory organizations that aid in the process of corporate restructuring. If the quality of a business is not observable by an outsider, then a firm that is trying to sell the business faces the problem of adverse selection. A game-theoretic model is used to show that this problem can be alleviated if the restructurer converts the business into a transitory joint venture with the potential buyer. Transitory joint venturing is the optimal way to achieve corporate restructuring if joint venture administrative cost is moderately high and if a large proportion of businesses that are up for sale are of low quality. Case studies of corporate restructuring through transitory joint ventures are used to illustrate and extend these arguments.

**Natale, Piergiiovanna**

**PD** February 1996. **TI** Posted vs. Negotiated Prices Under Incomplete Information. **AA** Universita Cattolica del Sacro Cuore, Milano and University of Exeter. **SR** University of Exeter, Department of Economics Discussion Paper: 96/03; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. **PG** 12. **PR** no charge. **JE** D42, D43, D82. **KW** Incomplete Information. Bargaining. Pricing Institutions.

**AB** This paper addresses the issue of selecting pricing institutions in a bilateral monopoly. Suppose a buyer and seller can benefit from exchanging one unit of a good. The seller is entitled to select the pricing institution. He can either make a take-it-or-leave-it offer or enter a bargaining game. Under incomplete information, a take-it or leave-it offer performs two tasks. When information is one-sided incomplete, it prevents the occurrence of a Coase conjecture outcome. When uncertainty is two-sided, it signals the seller's cost in providing the good. Thus, a seller who finds it unprofitable to commit under one-sided incomplete information, may be prepared to do so when the buyer is uncertain about his type. This leads to conclude that pricing institutions are endogenous with respect to the information available to the trading parties.

**Naylor, Robin A.**

**TI** Tax Evasion. Social Customs and Optimal Auditing. **AU** Myles, Gareth D.; Naylor, Robin A.

**Neal, Robert**

**PD** March 1995. **TI** How Reliable are Adverse Selection Models of the Bid-Ask Spread? **AU** Neal, Robert; Wheatley, Simon. **AA** Neal: Federal Reserve Bank of Kansas City. Wheatley: Australian Graduate School of Management and University of New South Wales. **SR** Federal Reserve Bank of Kansas City, Research Working Paper: 95/02; Research Division, Federal Reserve Bank of Kansas City, 925 Grand Blvd., Kansas City, MO 64198. **PG** 26. **PR** no charge. **JE** D82, G12. **KW** Bid-Ask Spreads. Stocks. Asymmetric Information.

**AB** Theoretical models of the adverse selection component of bid-asked spreads predict the component arises from asymmetric information about a firm's fundamental value. We test this prediction using two well know models (Glosten and Harris (1988) and George, Kaul, and Nimalendran (1991)) to estimate the adverse selection component for closed-end funds. Closed-end funds hold diversified portfolios and report their net asset values on a weekly basis. Thus, there should be little uncertainty about their fundamental values and their adverse selection components should be minimal. Estimates of the component from the two models, however, average 19 and 52 percent of the spread. These estimates, while smaller than corresponding estimates from common stocks, are large enough to raise doubts about the reliability of these models.

**PD** March 1995. **TI** Direct Tests of Index Arbitrage Models. **AA** Federal Reserve Bank of Kansas City. **SR** Federal Reserve Bank of Kansas City, Research Working Paper: 95/03; Research Division, Federal Reserve Bank of Kansas City, 925 Grand Blvd., Kansas City, MO 64198. **PG** 28. **PR** no charge. **JE** G14, G12. **KW** Stock Index. Index Arbitrage Models.

**AB** Previous tests of stock index arbitrage models have rejected the no-arbitrage constraint imposed by these models. This paper provides a detailed analysis of actual S&P 500 arbitrage trades and directly relates these trades to the predictions of index arbitrage models. An analysis of arbitrage trades suggests that (i) short sales rules are unlikely to restrict arbitrage, (ii) the opportunity cost of arbitrage funds exceeds the Treasury Bill rate, and (iii) the average price discrepancy captured by arbitrage trades is small. Tests of the models provide some support for a version of the arbitrage model that incorporates an early liquidation option. The ability of these models to explain arbitrage trades, however, is relatively low.

**Neary, Hugh M.**

PD March 1995. TI Strategic Investment and the Co-existence of Labour Managed and Profit-Maximising Firms. AU Neary, Hugh M.; Ulph, David. AA University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 95/13; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 31. PR 20 cents per page Canadian to other than educational institutions. JE D43, L13, P13, P51. KW Labor Managed Firm. Cooperative Enterprise. LMF-PMF Duopoly. Strategic Investment.

AB We examine firm profitability in mixed duopoly equilibrium with one labor managed (LM) firm and one profit maximizing (PM) firm, and with strategic investment. We show (1): no mixed-duopoly equilibrium exists in which the firms simultaneously earn zero profits; (2) parameter values such that the LM (resp. PM) firm has zero profits ensure losses for the PM firm (resp. profits for the LM firm); (3) in a mixed duopoly that replaces a zero-profit PM (resp. LM) duopoly, the LM firm is always profitable, but the PM firm may or may not be profitable (resp. is never profitable).

**Neary, J. Peter**

TI Learning by Doing, Precommitment and Infant-Industry Protection. AU Leahy, Dermot; Neary, J. Peter.

**Nedde, Ellen**

PD November 1995. TI Welfare Reform in the United States. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/124; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 14. PR not available. JE I38, H53, J64. KW Welfare Reform. Poverty.

AB This paper reviews the structure and trends of the U.S. welfare system and the U.S. Administration's reform proposals. It shows that, despite the attention the program receives, the welfare program is actually quite small and has experienced moderate rates of growth. However, the system does face serious problems. In particular, its structure sets up strong financial disincentives to paid employment and saving at the same time that its low level of benefits fails to lift low-income children and their families out of poverty.

PD November 1995. TI Health Care Cost Containment. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/126; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 22. PR not available. JE I11, I18. KW Cost Containment. Health Care. Insurance Reform.

AB The Administration's proposals to reform the U.S. health care system sought to provide for universal health insurance coverage while containing the growth of health care spending. This paper focuses on the latter issue and discusses the ability of regulatory and market-oriented reforms to achieve health care cost containment from several angles: an international comparison of national cost containment measures, a review of past cost containment efforts in the United States, and a discussion of the estimated effects on health care costs of alternative proposals to reform the U.S. health care system.

**Neumann, Manfred J.M**

PD January 1995. TI Comparative Study of Seigniorage:

Japan and Germany. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/304; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 32. PR no charge. JE O57, N10. KW Comparative Studies. Seigniorage. Germany. Japan. Budget Deficits.

AB This paper presents a comparative study of the generation and distribution of seigniorage in Germany and Japan. The focus is on the contribution that seigniorage has made to the finance of budget deficits. It is shown that over decades this has been much less than one would expect applying the traditional concept of monetary seigniorage or the Drazen-concept of the real resource burden carried by the private sector. The study reveals for both countries that the differential loss of seigniorage results from negative real returns on the portfolio of non-government debt. A major factor is the repeated revaluation of the Yen and the D-Mark which has reduced the annual rate of return by about 2 percentage points on average over the sample period 1961-91 in both countries.

PD July 1995. TI Divergent Trends in the Velocity of Money. AU Neumann, Manfred J.M.; Wesche, Katrin. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/320; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 30. PR no charge. JE E24, E41. KW Velocity of Money. Immigration. Unemployment.

AB This paper discusses alternative explanations of trends in the velocity of different money aggregates put forward in the literature. We make a fresh approach towards explaining changes in velocity trends by introducing a hypothesis on the distribution of money holdings. This leads to a number of new hypotheses about the impact of different kinds of structural change on the velocity of money, such as permanent immigration, rising unemployment or the growing importance of the services sector. We present some evidence for Germany that suggests that trend changes in the structure of the economy may have induced a negative velocity trend.

PD December 1995. TI Society, Government, and Central-Bank Independence. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/338; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 20. PR no charge. JE C72, E58. KW Inflation. Time-Inconsistency. Central-Bank Independence.

AB The paper reexamines the inflation bias of time-inconsistent monetary policy. A benevolent government can eliminate the bias by using two policy instruments instead of one. However, the time-inconsistency result can be kept formally, provided a non-benevolent government has the private interest of preserving the level of distortionary regulation and of collecting the inflation tax. Such government has no use for normative solutions of the inflation problem. The paper also presents a positive theory of central-bank independence. Goal independence should be defined as the right for bankers of choosing target values. On the hypothesis that the bankers' non-pecuniary payoff depends on expected inflation, they will deliver zero inflation.

PD January 1996. TI Problems in Measuring Central-Bank Independence. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion

Paper: B/352; Sonderforschungsbereich 303 an der Universität Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 25. PR no charge. JE E58, E61. KW Central-Bank Independence. Central-Bank Indicators.

AB It has become commonplace in macroeconomics that granting a central-bank independence from government is a device for society of securing a lower average level of inflation. While the government suffers from the time-inconsistency problem to monetary policy at full scale if the central banker is a completely dependent executor of government directives, the problem can be diminished by providing the central banker with the power of running monetary policy differently by himself. Rogoff (1985) has shown that a government gains from appointing a more "conservative" central banker who puts a larger weight on the objective of zero inflation than the objective function of the government implies. The Rogoff-banker achieves lower inflation on average at the cost of reducing the degree of output stabilization. In the theoretical literature Rogoff's more conservative central banker is considered to be an independent banker. However, this is a misleading interpretation, given that this banker does not enjoy goal independence but is subordinated to the government's objective function (Neumann, 1995).

#### Neumark, David

TI Sex, Wages, and Productivity: An Empirical Analysis of Israeli Firm-Level Data. AU Hellerstein, Judith K.; Neumark, David.

#### Neven, Damien

PD July 1994. TI Trade Liberalization with Eastern Nations. How Sensitive? AA Universite de Lausanne. SR Centre for Economic Policy Research, Discussion Paper: 1000; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 37. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F13, F14, F15. KW Central Europe. Eastern Europe. Trade Liberalization. Political Economy.

AB This paper analyzes the political economy of trade liberalization by the European Community towards Eastern nations. We identify the sectors that are both sensitive and politically effective. We find that Eastern nations may have a comparative advantage in industries that use capital and (relatively) unskilled labor intensively. We suggest that a shift in the distribution of income away from capital and labor in favor of human capital and regional distribution may drive the political economy of protection in the North of Europe. By contrast, the protection of specific factors may be the most important element in the South of Europe.

PD March 1995. TI Trade Liberalisation and the Co-Ordination of Competition Policy. AU Neven, Damien; Seabright, Paul. AA Neven: University of Lausanne and CEPR. Seabright: Churchill College, Cambridge and CEPR. SR Universite de Lausanne Cahiers de Recherches Economiques: 9503; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 30. PR no charge. JE F15, D43, F13. KW Competitive Policy. Policy Coordination. Trade. Competition.

AB This objective of this paper is twofold. First, we analyze the link between trade and anti-competitive behavior in a variety of models. Our analysis supports the presumption that trade liberalization enhances domestic competition so that trade

policy and domestic competition policies affecting barriers to entry tend to be substitutes for one another but we also identify some circumstances where increased vigilance at the national level is indeed warranted when trade is liberalized. We observe that predation may sometimes become more frequent under these conditions. We find also that whether the scope for collusion is enhanced when trade barriers are removed depends on the magnitude of the trade liberalization and the type of factors giving rise to trade. We find no presumption, however, that the liberalization of trade in goods enhances the incentive to undertake uncompetitive mergers across jurisdictions. This suggests that increased vigilance towards international mergers should be appropriately associated with the liberalization of capital flows rather than the liberalization of trade. Second, we discuss the appropriate institutional framework for organizing international cooperation in competition policy. We find that the existing powers of the WTO can deal adequately with only some of the potential conflicts arising across jurisdictions. We argue that a cooperative mechanism to resolve international conflicts will operate only if there is a reasonable homogeneity of interests between the members of a few international groups. If such condition is not met, strengthening the power of the WTO will be inevitable and hard questions about its accountability will have to be faced.

PD March 1995. TI Technology Sourcing and FDI in the EC: an Empirical Evaluation. AU Neven, Damien; Siotis, George. AA Neven: University of Lausanne and CEPR. Siotis: Free University of Brussels. SR Universite de Lausanne Cahiers de Recherches Economiques: 9508; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 21. PR no charge. JE F23, L11, O33. KW Research and Development. Foreign Direct Investment. Technology Sourcing.

AB This paper presents an econometric analysis of foreign direct investment flows in the four large countries of the EEC, at the sectoral level and for the period 1984-1989. We find that technological sourcing might be an important motive behind investment flows originating in the US and Japan but not behind intra-EC flows. Besides, we observe that "tariff jumping" may be an additional motivation behind Japanese and US investments and that all investment flows responded positively to the prospect of the internal market.

PD June 1995. TI European Industrial Policy: the Airbus Case. AU Neven, Damien; Seabright, Paul. AA Neven: University of Lausanne and CEPR. Seabright: Churchill College, Cambridge and CEPR. SR Universite de Lausanne Cahiers de Recherches Economiques: 9509; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 60. PR no charge. JE L13, L52, L62. KW Industrial Policy. Airframe Industry. Calibration.

AB This paper reports the results of a model whose purpose is to estimate the impact that Airbus's presence has had on the market for large commercial airliners. Our model reproduces (in a multi-stage game) a stylized characterization of six main stages in the development of the large commercial airliner market in a triopoly with four products segments. Then the model is used to ask a number of counterfactual questions about what would have happened in a variety of circumstances (notably ones in which Airbus did not enter the market). Besides product developments, we also model decisions about the level of expenditure on research and development, in order

to see whether Airbus's presence has had an impact on the type and technological specification of aircraft produced as well as on their quantity and price. We find that given the prior presence of McDonnell-Douglas in this market, Airbus has had only a modest impact on the prices of commercial airliners (an average of 3.5%).

**PD** April 1996. **TI** Competition Policy in Switzerland. **AU** Neven, Damien; Von Ungern-Sternberg, Thomas. **AA** Departement d'Econometrie et d'Economie Politique, Ecole des HEC and Universite de Lausanne. **SR** Universite de Lausanne Cahiers de Recherches Economiques: 9609; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. **PG** 49. **PR** no charge. **JE** K21, L13. **KW** Competition Policy. Switzerland. Political Economy. **AB** This paper provides a critical review of competition policy in Switzerland. We analyze the legal statute, the institutional arrangements for its implementation and the case law since 1985. We find that Cartel Commission which was given wide discretion by the law has been relatively immune from judicial and political challenge and vulnerable to interest groups. The analysis of the relevant markets, the evaluation of dominance and that of countervailing benefits tend to be poorly motivated. In addition, the concept of effective competition, which is central to the implementation of the law, has not been substantiated by the case law. Accordingly, the decisions tend to be highly judgmental, which reflects the weak accountability of the Commission. Fortunately, both the substantial provisions of the law and institutional framework have been improved by the recent revision of the statute. Being more accountable, the Commission may have no choice but to improve its practice.

#### Neves, Joao C.

**TI** Business Cycles in a Small Open Economy. **AU** Correia, Isabel; Neves, Joao C.; Rebelo, Sergio.

#### Nielsen, Carsten Krabbe

**PD** August 1995. **TI** Rational Belief Structures and Rational Belief Equilibrium. **AA** University of Copenhagen. **SR** University of Copenhagen, Institute of Economics, Discussion Paper: 95/14; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. **PG** 37. **PR** not available. **JE** D50. **KW** Stable Stochastic Processes. Non-stationary. Rational Beliefs. General Equilibrium.

**AB** The paper introduces some simplifying tools and methods for studying Rational Beliefs and for proving existence of Rational Belief Equilibria: We identify a set of stable non-stationary stochastic processes, named SIDS processes. Furthermore, we introduce the concept of a Rational Belief Structure, which formulates the Rational Beliefs of the agents as beliefs about the distribution of exogenous variables and the beliefs of other agents. The use of the developed apparatus is demonstrated by showing existence of a set of Rational Belief Equilibria in an Overlapping Generations Model with money and one commodity.

#### Nielsen, J. Aase

**PD** May 1995. **TI** The Pricing of Asian Options under Stochastic Interest Rates. **AU** Nielsen, J. Aase; Sandmann, Klaus. **AA** Nielson: University of Aarhus. Sandmann: University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/323;

Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 33. **PR** no charge. **JE** G13, D81, C15. **KW** Asian Options. Forward Risk Adjustment. Monte Carlo Simulation.

**AB** The purpose of this paper is to analyze the effect of stochastic interest rates on the pricing of Asian options. It is shown that a stochastic, in contrast to a deterministic, development of the term structure of interest rates has a significant influence. The price of the underlying asset, e.g. a stock or oil, and the prices of bonds are assumed to follow correlated two dimensional Ito processes. The averages considered in the Asian options are calculated on a discrete time grid, e.g. all closing prices on Wednesdays during the lifetime of the contract. The value of an Asian option will be obtained through the application of Monte Carlo simulation, and for this purpose the stochastic processes for the basic assets need not to be severely restricted. However to make comparison with published results originating from models with deterministic interest rates we will stay within the setting of a Gaussian framework.

**PD** November 1995. **TI** Security Linked Life Policies Under Stochastic Interest Rates. **AU** Nielsen, J. Aase; Sandmann, Klaus. **AA** Nielsen: University of Aarhus. Sandmann: University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/327; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 33. **PR** no charge. **JE** G13, D81. **KW** Asian Option. Forward Risk Adjustment. Life Insurance. Monte Carlo Simulation. Stochastic Interest Rates.

**AB** A security linked life policy combines a life insurance and an investment strategy with a minimum guarantee. The benefit of this contract is determined by the guaranteed amount plus a bonus equal to a call on the portfolio. This bonus is similar to an Asian option. We analyze the relationship between the periodic insurance premium and its proportional share invested into the portfolio. For a general model of the financial risks we show the existence and uniqueness of an insurance premium. Furthermore the premium is strictly increasing and as a function of the share invested.

#### Nilles, Delia

**PD** November 1995. **TI** Universite de Lausanne: Son Impact Economique. **AA** Universite de Lausanne. **SR** Universite de Lausanne Cahiers de Recherches Economiques: 9512; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. **PG** 50. **PR** no charge. **JE** J44, I21, R23. **KW** Migration. Universities.

**AB** The impact of the University of Lausanne on its canton, Vaud, is studied.

#### Niou, Emerson M.S

**PD** August 1995. **TI** A Theory of Alliance Formation. **AU** Niou, Emerson M.S.; Tan, Guofu. **AA** Niou: Duke University. Tan: University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 95/22; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 26. **PR** 20 cents per page Canadian to other than educational institutions. **JE** C71, D74, H56. **KW** Alliance. Conflicts. Cooperation.

Stability.

**AB** In this paper we develop a game-theoretic model of alliance formation in three-country systems to examine the effects of inter- and intra- alliance competition on alliance stability. In our model, countries first choose what alliances to form and then decide how many resources to invest in defense. Our analysis suggests that both types of competition affect every country's investment decisions and alliance strategies. Four main conclusions can be drawn from our theoretical results. First, in order for a grand coalition to be stable, the distribution of initial resource among the three countries must be fairly symmetric. Second, the stand-alone system can never be stable. Third, the bipolar system with the two weaker countries forming an alliance can never be stable. Finally, a high degree of intra-alliance cooperation can reduce the likelihood of inter-alliance conflict.

**Noeldeke, Georg**

**TI** A dynamic Model of Equilibrium Selection in Signaling Markets. **AU** Samuelson, Larry; Noeldeke, Georg.

**Norman, George**

**PD** June 1994. **TI** Product Variety and Welfare Under Discriminatory and Mill Pricing Policies. **AU** Norman, George; Thisse, Jacques-Francois. **AA** Norman: University of Edinburgh. Thisse: CERAS and Ecole Nationale des Ponts et Chaussees. **SR** Centre for Economic Policy Research, Discussion Paper: 972; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 19. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** L13, L41, R32. **KW** Discriminatory Pricing. Mill Pricing. Product Variety. Regulation. Spatial Contestability.

**AB** We re-examine the economic justification for the regulation of firms' spatial price policies. Existing analysis, by treating market structure as exogenous, loses an important trade-off. Discriminatory pricing is more competitive between incumbents but acts as a strong deterrent against entry. Product variety is determined by the degree of spatial contestability of the market (the ability of entrants to make binding location commitments) and by whether firms can price discriminate. The entry deterring effect of discriminatory pricing is dominant whatever the degree of spatial contestability. The lower the degree of spatial contestability, the more effective is discriminatory pricing at limiting entry and the more likely is it that mill pricing is socially desirable.

**Nowakowski, Joerg**

**PD** March 1996. **TI** Using the Generalized Assignment Problem in Scheduling the ROSAT Space Telescope. **AU** Nowakowski, Joerg; Schwaerzler, Werner; Triesch, Eberhard. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: 95852; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 20. **PR** no charge. **JE** C44, C61. **KW** Assignment Problem.

**AB** ROSAT is a satellite-borne X-ray observatory. Mission planning consists of scheduling up to half a year in advance a preselected large collection of targets. It is shown that a relaxation of the ROSAT scheduling problem can be modeled as a generalized assignment problem and that the solutions obtained with this method lead to good solutions of the non-

relaxed problem. Other heuristics as well as upper bounds on the quality of solutions are discussed.

**O'Rourke, Kevin**

**PD** June 1994. **TI** Irish Economic Growth, 1945-88. **AU** O'Rourke, Kevin; Grada, Cormac O. **AA** University College Dublin. **SR** Centre for Economic Policy Research, Discussion Paper: 975; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 46. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** N14, O47. **KW** Economic Growth. Convergence. Ireland.

**AB** The paper reviews the economic performance of the Republic of Ireland since 1945. Its focus is comparative: Ireland's record is assessed against the evidence in OECD and Penn Mark V datasets for "convergence club" of European economies, and is found wanting. The comparison confirms that the 1950s were a particularly bleak decade for Ireland but, more surprisingly, Ireland also performed less well than predicted by convergence criteria in both the 1960-73 and 1973-88 periods. The paper then assesses a range of explanations for this poor performance.

**Oates, Wallace E.**

**PD** December 1994. **TI** Green Taxes: Can We Protect the Environment and Improve the Tax System at the Same Time? **AA** University of Maryland. **SR** University of Maryland, Department of Economics, Working Paper: 94/10; University of Maryland, Department of Economics, College Park, MD 20742. **PG** 19. **PR** no charge. **JE** H21, H23, Q28. **KW** Pollution Taxes. Environmental Regulation.

**AB** This paper explores the emerging literature on the "double dividend:" the claim that pollution taxes can both reduce environmental damage and provide a more efficient tax system that relies less heavily on distorting taxes. The initial findings in this literature suggest somewhat surprisingly that there may be no such double dividend. Moreover, the results have some troubling implications for the properties of other types of regulatory programs. The paper then goes on to discuss the central issues in the design and implementation of environmental taxes.

**Offer, Avner**

**PD** January 1996. **TI** Between the Gift and the Market: The Economy of Regard. **AA** Nuffield College, Oxford. **SR** University of Oxford, Discussion Papers in Economic and Social History: 3; Avner Offer, Nuffield College, Oxford, OX1 1NF. **PG** 42. **PR** not available. **JE** D51, D52, D64. **KW** Exchange Markets. Gifts. Intergenerational Transfers.

**AB** "The Great Transformation" from customary exchange to impersonal markets has not been completed. Reciprocal exchange pervades modern societies. It takes the form of "gifts" which are reciprocated without certainty. It is driven by the pursuit of "regard": the approbation of others. The idea is found in Adam Smith's work. Money is avoided in regard exchange, because it is impersonal. Instead, the regard signal is embodied in goods, services or time (attention). The personalization of gifts authenticates the signal. Large-scale reciprocal exchange persists in family formation and in inter-generational transfers. It features in labor markets, in agriculture, in the professions, in marketing, in entrepreneurship, and also in corruption and crime. Reciprocal exchange is constrained by time and psychic

energy, but is likely to persist as a preferred source of regard.

### Oppers, Erik

PD December 1995. TI A Model of the Bimetallic System. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/144; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 16. PR not available. JE E42, F33, N20. KW Bimetallism, Silver.

AB This paper formalizes Irving Fisher's century-old model of bimetallism and adds the important disequilibrium dynamics to deal with the long periods during which bimetallic countries were on effective monometallic standards. It resolves a long standing puzzle in the bimetallic literature regarding the remarkable stability of the gold/silver price ratio in the nineteenth century by modeling the bimetallic mint ration as a regulating barrier to the gold/silver price ratio. It thus provides a clean-cut example of target-zone model that-- in contrast to other such models in the literature-- exhibits the main predicted nonlinearities in the data.

### Ord, J.K

PD April 1995. TI Estimation and Prediction for a Class of Dynamic Nonlinear Statistical Models. AU Ord, J.K.; Koehler, A.; Snyder, R.D. AA Ord: Pennsylvania State University. Koehler: Miami University. Snyder: Monash University. SR Monash University, Department of Econometrics Working Paper: 4/95; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. PG 34. PR no charge. JE C13, C15, C22. KW Maximum Likelihood. Forecasting. Holt-Winters Method. Nonlinear State Space. Bootstrap Method.

AB A class of dynamic, nonlinear, statistical models is introduced for the analysis of univariate time series. A distinguishing feature of the models is their reliance on only one primary source of randomness: a sequence of independent and identically distributed normal disturbances. It is established that the models are conditionally Gaussian. This fact is used to define a conditional maximum likelihood method of estimation and prediction. A particular member of the class is shown to provide the statistical foundations for the multiplicative Holt-Winters method of forecasting. This knowledge is exploited to provide methods for computing prediction intervals to accompany the more usual point predictions obtained from the Holt-Winters method. The methods of estimation and prediction are evaluated by simulation. They are also illustrated with an application to Canadian retail sales.

### Ostry, Jonathan D.

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

TI Macroeconomic Shocks and Trade Flows Within Sub-Saharan Africa: Implications for Optimum Currency Arrangements. AU Bayoumi, Tamim A.; Ostry, Jonathan D.

### Otker, Inci

PD November 1995. TI Speculative Attacks and Currency Crises: the Mexican Experience. AU Otker, Inci; Pazarbasioglu, Ceyla. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/112;

International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 24. PR not available. JE B22, F31, F33. KW Speculation. Currency Crises. Mexico.

AB This paper estimates a speculative attack model of currency crises in order to identify the role of economic fundamentals and any early warning signals of a potential currency crisis. The data from the Mexican economy was used to illustrate the model. Based on the results, a deterioration in fundamentals appears to have generated high one-step-ahead probabilities for the regime changes during the sample period 1982-1994. Particularly, increases in inflation differentials, appreciations of the real exchange rate, foreign reserve losses, expansionary monetary and fiscal policies, and increases in the share of short-term foreign currency debt appear to have contributed to the market pressures and regime changes in that period.

### Ours, Jan van

TI Temporal Aggregation Bias in Stock-Flow Models. AU Coles, Melvyn G.; Burdett, Kenneth; Ours, Jan van.

### Overmeer, W.J.A.M

TI Strands of Practice in OR (The Practitioner's Dilemma). AU Corbett, C.J.; Overmeer, W.J.A.M.; Van Wassenhove, Luk N.

TI What the Cases Don't Tell Us. AU Corbett, C.J.; Overmeer, W.J.A.M.; Van Wassenhove, Luk N.

### Paarsch, Harry J.

TI Differences in Earnings and Wage Distributions Between Canada and the U.S.: An Application of a Semi-Parametric Estimator of Distribution Functions with Covariates. AU Donald, Stephen G.; Green, David A.; Paarsch, Harry J.

### Padilla, A. Jorge

PD July 1994. TI Wage Bargaining in Industries with Market Power. AU Padilla, A. Jorge; Bentolila, Samuel; Dolado, Juan J. AA CEMFI. SR Centre for Economic Policy Research, Discussion Paper: 987; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 18. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE D43, J31, J51. KW Bargaining. Wages. Strategic Complementarity. Strategic Substitutability.

AB In this paper we develop a fully game-theoretic version of the right-to-manage model of firm-level bargaining where strategic interactions among firms are explicitly recognized. Our main aim is to investigate how equilibrium wages and employment react to changes in the labor and product markets, the business cycle and economic policy. We show that our comparative statics results hinge crucially on the strategic nature of the game, which in turn is determined by the relative bargaining power of unions and managers.

### Pages, Carman

TI The Cost of Business Cycles and the Stabilization Value of Unemployment Insurance. AU Beaudry, Paul; Pages, Carman.

### Palomba, Geremia

PD April 1995. TI How to Combine Pareto Optimality and Individual Liberty Using Welfare Interpersonal

Comparisons. AA University of Cambridge. SR University of Cambridge, Department of Applied Economics, Amalgamated Series Working Paper: 9517; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 26. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE D63. KW Pareto Optimality. Welfare Comparisons.

AB This paper examines the possibility of using welfare interpersonal comparisons to solve the "Impossibility of a Paretian Liberal" paradox of Sen. It discusses previous results by Suzimura and Wriglesworth, who sought a solution to Sen's paradox by using justice principles.

#### Papell, David H.

TI The Great Wars, the Great Crash, and the Unit Root Hypothesis: Some New Evidence About an Old Stylized Fact. AU Ben-David, Dan; Papell, David H.

#### Paque, Karl-Heinz

PD July 1994. TI The Causes of Post-War Slumps and Miracles. An Evaluation of Olsonian Views on German Economic Performance in the 1920s and the 1950s. AA Institut für Weltwirtschaft. SR Centre for Economic Policy Research, Discussion Paper: 981; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 56. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F43, J51, N14, J34, O52. KW Collective Action. Germany. Economic History. Institutions. Growth.

AB This paper examines whether the different macroeconomic performances of the German economy in two post-war decades provide evidence for the theory (first advanced by Mancur Olson) that sharp institutional breaks are conducive to economic growth because they destroy the existing network of distributional coalitions. It is shown that the answer to this question is negative because the institutional break in Germany after World War II was much less complete than assumed by Olson and others: all major interest groups quickly regained their traditional strength, and they did so in organizational forms that were not substantially more encompassing than before in the sense of Olson's theory. The paper proposes an alternative interpretation of the relevant periods in terms of stable corporatist institutions that reduce the absorptive capacity of an economy in a symmetric way, thus exacerbating the growth and employment effects of negative and positive exogenous shocks that originate in changes of the terms of trade or the speed of productivity growth.

#### Parker, Philip M.

PD July 1994. TI Collusive Conduct in Duopolies: Multimarket Contact and Cross-Ownership in the Mobile Telephone Industry. AU Parker, Philip M.; Roller, Lars-Hendrik. AA INSEAD. SR Centre for Economic Policy Research, Discussion Paper: 989; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 15. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE L13, L96. KW Collusion. Duopolistic Competition. Multimarket. Cross-Ownership.

AB The deregulation of the telecommunications industry has resulted in a variety of industry structures which have been created in the hope of increasing competition. One example is

the licensing of cellular telephone services in the United States. In the face of scarce radio spectrum, the Federal Communications Commission (FCC) has created duopolies in which two firms are granted licenses to compete in strictly defined product and geographic markets. Rate regulation typically imposed for natural monopolies is forgone because it is believed that two firms provide sufficient competition to prevent collusive pricing. We test this assertion using data collected from the cellular telephone industry in the United States. We find that cellular prices are significantly above competitive, as well as non-cooperative duopoly levels.

TI Marketing Information: A Competitive Analysis. AU Sarvary, M.; Parker, Philip M.

PD 1995. TI Order-of-Entry and the Diffusion of Trials in a New Category. AU Parker, Philip M.; Gatignon, Hubert. AA INSEAD. SR INSEAD, Working Papers: 95/52/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 18. PR not available. JE L11, M31, M32. KW Order-of-Entry. Price Elasticity. Advertising Elasticity. Competitive Entry.

AB This paper builds on the recent literature on order-of-entry effects which indicates that it is critical to model the diffusion phenomenon of a new brand in order to estimate marketing mix elasticities and order-of-entry effects. More specifically we test hypotheses regarding the role of order-of-entry on the brand level trial process within a category. Consistent with these research hypotheses, the results demonstrate that a brand's trials and its pricing and advertising elasticities vary systematically as a function of competitive entry. Competitive influences (which are negative) increase as order-of-entry is delayed. Short-term price elasticities are found to be an inverted U relationship with the order-of-entry, whereby early followers have the highest elasticities, as compared to the pioneer and to the later followers. Advertising elasticities decline as the number of competitors increases.

PD February 1995. TI National Brands Versus Private-Labels: An Empirical Study of Competition, Advertising and Collusion. AU Parker, Philip M.; Kim, N. AA Parker: INSEAD. Kim: Hong Kong University of Science and Technology. SR INSEAD, Working Papers: 95/32/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 48. PR not available. JE L14, M37. KW Retailing. Private-Label Brands. Advertising. Collusion. Competition.

AB This paper considers certain aspects of competition between national brands and quality-equivalent private-label brands (a form of store, house or own-label branding). We investigate the impact of advertising on the ability of brands to increase market power using a model of Cournot competition. Supporting recent theoretical arguments (though contradicting others), our industry study reveals that heavy advertising among national brands can increase prices, revenues, and profits for both national brands and private-label brands. In particular, we find that all players can peacefully coexist: national brand collude amongst themselves, private-label brands collude amongst themselves, and national brands collude with private-label brands. This holds despite price dispersion across brands, with private-label brands being sold at lower prices. Model outcomes are quantitatively validated by cross-competitor correlations which reveal perfectly synchronized pricing strategies, and qualitatively validated by industry interviews.

**TI** A Cross-Cultural Study of Interpersonal Information Exchange. AU Dawar, N.; Parker, Philip M.; Price, L.J.

**TI** Marketing Information: A Competitive Analysis. AU Sarvary, M.; Parker, Philip M.

#### Paterson, Donald G.

**PD** February 1995. **TI** Institutional Adjustment and the New Trade Order: The WTO and NAFTA. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 95/06; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 18. **PR** 20 cents per page Canadian to other than educational institutions. **JE** F01, K4, F13. **KW** Economics. Trade. Policy. World Trade Organization.

**AB** Dispute settlement procedures are the key to solving trade issues under the new WTO. This paper examines the record of dispute panels with particular emphasis on the cases which have arisen between Canada and the United States. It conjectures that the success of the dispute resolution procedures depends heavily on the creation of new institutions to monitor and enforce decisions. Federal nation-states represent special problems because of the shared jurisdiction which may cover trade-related issues.

#### Pazarbasioglu, Ceyla

**TI** Linkages Between Financial Variables, Financial Sector Reform and Economic Growth and Efficiency. AU Johnston, Barry R.; Pazarbasioglu, Ceyla.

**TI** Speculative Attacks and Currency Crises: the Mexican Experience. AU Otker, Inci; Pazarbasioglu, Ceyla.

#### Peaucelle, Irina

**PD** May 1995. **TI** Toward Models for Analysis of Corporate Restructuring. **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 9508; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 24. **PR** 25 F.F. **JE** D23, B22, P21. **KW** Corporate Restructuring. Modelling. CEEC.

**AB** Several models, elaborated by different authors for the analysis of corporate restructuring in Central and Eastern Europe, are surveyed in this paper. The models presented here are those which reflect the specificity of corporate behavior in these countries since the collapse of central planning. Given the sudden change of environment (liberalization, privatization, the opening of markets) the behavior of the firm differs from the behavior usually modelled in industrial economics; their objectives of management and production also change, and new products are introduced. We will discuss appropriateness of modelling as an instrument for the analysis of complex restructuring problems in such economies with imperfect markets.

#### Pedersen, Peder J.

**PD** July 1994. **TI** Post-War Growth of the Danish Economy. **AA** University of Aarhus. **SR** Centre for Economic Policy Research, Discussion Paper: 994; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 39. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** N14, O47, O52. **KW** Productivity Performance. Growth Determinants. Economic Policy.

**AB** Economic growth in Denmark in the post-war years has been close to the OECD average. The "golden age" of very high growth was, however, of shorter duration in Denmark than in most other OECD countries. The main emphasis in this paper is on the description of productivity performance in the post-war years, and growth performance in a long-run international context. Growth perspectives originating in the 1930s and 1940s are included before the analysis of growth determinants in the post-war years is taken up. Sectoral shifts in production and shifts in relative prices contribute significantly to a reduction of growth some years before the OPEC oil price shocks. Finally, economic policy in the post-war years is discussed with special emphasis on the implications for growth.

#### Peitz, Martin

**PD** January 1995. **TI** Aggregation and Strategic Complementarity in a Model of Price Competition. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/469; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 33. **PR** no charge. **JE** D11, D43, L13. **KW** Demand Aggregation. Oligopoly Equilibrium. Product Differentiation. Multiplier Effect. Adaptive Learning.

**AB** In a differentiated oligopoly a finite number of firms compete in prices. Using aggregation procedures of Grandmont and Prekopa I derive the existence and uniqueness of an equilibrium from distributional assumptions on the customers' characteristics. Furthermore, I apply the theory of games with strategic complementarities to obtain results on comparative statics and learning.

**PD** January 1995. **TI** Utility Maximization in Models of Discrete Choice. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/470; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 4. **PR** no charge. **JE** D11, D19. **KW** Utility Maximization. Discrete Choice. Duality Theory. Indirect Utility Function.

**AB** In various common models of discrete choice it is assumed that consumers either choose one variant of a good of which they consume one unit and none of the other variants or they choose the outside option. Articles analyzing this class of models usually commence with an evaluation function which is called a conditional indirect utility function. A consumer chooses the variant with the highest value: if for some variant the value is positive, a consumer buys one unit of the variant which give him the maximal value. Otherwise, he chooses the outside option. Duality theory suggests that there is an associated direct utility function. However, the results of duality theory cannot be applied to this problem because continuity is not satisfied. Therefore, there are some doubts whether the evaluation function is indeed an indirect utility function and whether it is consistent with utility maximization. I will construct a direct utility function such that the underlying preference relation satisfies reflexivity, transitivity, completeness, and local nonsatiation. I will then show that this direct utility function has as its counterpart the indirect utility function I was looking for. Hence consumer behavior in discrete choice models of the type presented can be derived from utility maximization.

**TI** The Differentiation Triangle. AU Canoy, Marcel; Peitz, Martin.



**PD** February 1995. **TI** The Circular Road Revisited. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/471; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 12. **PR** no charge. **JE** L13, D43, C72. **KW** Circular Road. Uniqueness of Equilibrium. Supermodularity.

**AB** In this note I extend the uniqueness result of equilibrium in the circular road from quadratic transportation costs to power transportation costs which are more convex. In addition, I show that the associated game is dominance solvable.

**PD** February 1995. **TI** Duopoly Equilibrium in Prices with Variable Demand. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/472; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 24. **PR** no charge. **JE** D11, D43, L13. **KW** Duopoly Equilibrium. Price Competition.

**AB** Two one-product firms compete in prices on a market with differentiated goods. Goods are defined in the spirit of Lancaster. They are differentiated because consumers switch from one good to the other at different relative prices. With the specification that total expenditure in the market is price-independent I give new results on the existence and uniqueness of equilibrium.

**PD** March 1995. **TI** Models a la Lancaster and a la Hotelling: When They are the Same. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/479; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 13. **PR** no charge. **JE** D11, L13. **KW** Product Differentiation. Characteristics Approach. Spatial Competition.

**AB** This note relates two different ways of modelling product differentiation to each other. In the first, consumer behavior is derived within the Lancasterian characteristics approach, while in the second, it is derived according to a model of spatial competition a la Hotelling. I provide an equivalence result showing that the two approaches are not only linked by analogy. In addition, under assumptions on the heterogeneity of consumers and a restriction on the potential of product differentiation, an existence result for these models with price competition is provided.

#### **Pellicer, Miguel**

**PD** not available. **TI** Functions of the Banco de Espana: An Historical Perspective. **AA** Banco de Espana. **SR** Banco de Espana Documento de Trabajo: 9330; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. **PG** 73. **PR** not available. **JE** N23, N24, E58. **KW** Central Bank.

**AB** This survey chronicles the history of the Banco de Espana. It presents a detailed review of the functions, policies, and structure of the bank in an historical context.

#### **Penalosa, Juan Maria**

**PD** not available. **TI** The Spanish Catching-Up Process: General Determinants and Contribution of the Manufacturing Industry. **AA** Banco de Espana. **SR** Banco de Espana Documento de Trabajo: 9428; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. **PG** 68. **PR** not available. **JE** F02,

F33, L60. **KW** Manufacturing Industry. European Community. Converging Economies. Productivity. Industrial Output.

**AB** This paper is devoted to the analysis of the real convergence process between Spain and the EC and the contribution to this process made by the manufacturing industry. The first part places emphasis on the peculiar higher convergence recorded by the Spanish economy in terms of wages and productivity per worker than in terms of income per capita. The very low proportion of employment to population is regarded as the main factor leading to that situation. The available data also point to a clear relationship of both higher employment and lower wages per employee to higher relative income per capita. The concept of industrial catching-up is introduced and analyzed taking into account the productivity and employment performance in this sector. The poor results recorded in terms of industrial catching-up in Spain highlight the temporary nature of the improvement in the overall real convergence process experienced after the accession to the EC, as this was mainly supported by the expansion of the service sector and coincided with a period of worsening in Spanish competitiveness. The evolution of industrial output shows a certain relationship to the performance of the external balance, which stresses the need to preserve industrial competitiveness in order to prevent the deterioration of the external sector and to make the catching-up process endure.

#### **Peng, Wensheng**

**PD** November 1995. **TI** The Fisher Hypothesis and Inflation Persistence -- Evidence from Five Major Industrial Countries. **AA** International Monetary Fund. **SR** International Monetary Fund, Working Paper: 95/118; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 16. **PR** not available. **JE** E31, E43. **KW** Fisher Effect. Interest Rate. Inflation.

**AB** This paper presents an empirical evaluation of the strength of the Fisher effect which predicts a positive relationship between the nominal interest rate and inflation in the postwar period in the five major industrial countries, utilizing recently developed time series techniques. The results suggest that the Fisher effect is stronger in France, the United Kingdom, and the United States than in Germany and Japan. It is argued that the differences in the linkage between the interest rate and the inflation rate as between the two groups of countries reflected in the time series properties of the inflation rates, which are, in turn, partly attributable to the different extent to which monetary authorities accommodated inflationary shocks. The empirical results have a number of implications for the long-term trend in the SDR interest rate and for the financing of the Fund's operations.

#### **Persson, Karl Gunnar**

**PD** December 1995. **TI** Despotism Liberalism and the Decline of Grain Market Regulation in Europe 1760-1850. **AA** University of Copenhagen. **SR** University of Copenhagen, Institute of Economics, Discussion Paper: 95/17; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. **PG** 21. **PR** not available. **JE** N23, N43, N73. **KW** Grain Markets. Deregulation.

**AB** The paper analyzes the long century of deregulation of European grain markets. Eighteen century reformers won the intellectual battle as to the merits of laissez faire markets for

grain but failed to convince the angry crowds, which were alerted by temporary increases in prices. Not until falling transport prices in the nineteenth century helped the integration of markets did they perform well enough to end popular endorsement of traditional market intervention.

#### **Pezzey, John**

PD July 1995. TI Single-Peakedness and Initial Sustainability in Capital Resource Economies. AU Pezzey, John; Withagen, Cees. AA Pezzey: University College London. Withagen: Eindhoven University of Technology. SR University College London Discussion Paper: 95/09; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG 28. PR 3 Pounds; checks payable to Department of Economics, University College London. JE O41, Q32. KW Single Peakedness. PV-Optimality. Sustainability. Non-Renewable Resources. Constraint Technology.

AB We show that utility and consumption are single-peaked or always falling over time on the PV-optimal (present-value-maximizing) path of a constant technology economy with one non-depreciating capital and one non-renewable resource stock, provided that the production function has constant returns to capital and resource flow, or is of Cobb-Douglas form. In the Cobb-Douglas case, we also show that a low (high) enough utility discount rate causes the PV-optimal consumption path to be initially sustainable (unsustainable) and rising (falling). We give a special case where explicit formulae can be found for the PV-optimal paths of all variables.

#### **Phylaktis, Kate**

PD December 1995. TI Capital Market Integration in the Pacific Basin Region: an Analysis of Real Interest Rate Linkages. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/133; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 23. PR not available. JE F21, F31, F32, F36. KW Interest Rates. Error Correction Models. Cointegration. Asia.

AB This paper investigates the extent to which financial markets in the Pacific Basin Region have become more integrated, by analyzing the comovements of real interest rates. The paper uses cointegration and error correction models and draws inferences on the degree of capital market integration by looking at the speed of adjustment of real interest rates following a shock. The results show that there has been an increase in capital market integration with both U.S. and Japan during the 1980s. Japan has not, however, overtaken U.S. in dominating the financial markets of these countries, except possibly in the case of Malaysia. Capital market integration is found to be greater in Singapore, Hong Kong and Taiwan Province of China. On the other hand, Japan is the least integrated with the United States.

#### **Piccione, Michele**

PD June 1995. TI Cost-Reducing Investment, Optimal Procurement and Implementation by Auctions. AU Piccione, Michele; Tan, Guofu. AA University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 95/16; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 29. PR 20 cents per page Canadian to other than educational institutions.

JE D44, G43, O32. KW Optimal Procurement. Auctions. Research and Development.

AB In this paper, we introduce cost-reducing investment in a standard procurement model. Potential suppliers invest in research and development (R&D) and then compete for a procurement contract from a buyer. We analyze two different settings. In the first one, the buyer is able to commit to a procurement mechanism prior to investment. We show that when the R&D technology exhibits decreasing returns to scale the full-information solution can be uniquely implemented by first-price and second-price sealed-bid auction mechanisms. In the second setting, the buyer and the suppliers choose procurement mechanisms and the levels of investment simultaneously. We provide conditions for unique equilibrium and show that as the number of suppliers increases the equilibrium contract exhibits high-powered incentives.

TI Entry and Exit in Hub-Spoke Networks. AU Hendricks, Ken; Piccione, Michele; Tan, Guofu.

TI A Simple Model of Expert and Non-Expert Bidding in First Price Auctions. AU Tan, Guofu; Piccione, Michele.

#### **Pill, Huw**

PD November 1995. TI Financial Indicators and Financial Change in Africa and Asia. AU Pill, Huw; Pradhan, Mahmood. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/123; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 27. PR not available. JE D92, E21, E51, E52, E58. KW Economic Reform. Deregulation. Financial Stabilization. Africa. Asia.

AB Deregulation of the financial system often proceeds in tandem with macroeconomic stabilization centered on monetary and other financial targets. This paper presents a model where there may be conflict between these processes. The indicator properties of some financial variables may be rendered unstable by the liberalization process. However, other carefully selected financial aggregates may contain information about economic activity that is useful to policy makers during stabilization. Data from a group of selected African and Asian countries is examined. These are broadly consistent with the predictions of the model, while highlighting the importance of macroeconomic and financial stability for the success of financial reforms.

#### **Pinkse, Joris**

PD September 1995. TI A Simple Test for Spatial Correlation in Probit Models. AU Pinkse, Joris; Slade, Margaret E. AA University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 95/29; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 9. PR 20 cents per page Canadian to other than educational institutions. JE C12, C52, C21, C25. KW Spatial Statistics. Generalized Residuals. Binary Choice. Probit Model. Discrete Choice.

AB We propose a test for spatial correlation in Probit models that is a joint test for exclusion of spatially lagged-dependent variables and absence of spatial-error correlation. We give a maximum-likelihood justification for the test but use a simulations approach rather than relying on its asymptotic distribution.

**Planas, Christophe**

TI Estimation Error and the Specification of Unobserved Component Models. AU Maravall, Agustin; Planas, Christophe.

**Pong, Christopher K.M**

PD December 1994. TI The Withdrawal of Current Cost Accounting in the United Kingdom: a Study of the Accounting Standards Committee. AU Pong, Christopher K.M.; Whittington, Geoffrey. AA Pong: University of Manchester. Whittington: University of Cambridge. SR University of Cambridge, Discussion Papers in Accounting and Finance: AF9; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 45. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE M41, K22. KW Current Cost Accounting. Inflation Accounting. Accounting Standards. Regulation.

AB Evidence from the archives of the UK Accounting Standards Committee (ASC) is used to trace the events leading to the withdrawal of the current cost accounting standard, SSAP16, from 1980 to 1988. The ASC's role as a regulatory body is discussed in the light of the failure to obtain compliance with SSAP16 and to find an acceptable replacement.

**Portier, Franck**

TI Idiosyncratic Uncertainty, Capacity Utilization and the Business Cycle. AU Fagnart, Jean-Francois; Licandro, Omar; Portier, Franck.

**Potts, C.N**

TI Local Search Heuristics for Single Machine Scheduling With Batching to Minimize the Number of Late Jobs. AU Crauwels, H.A.J.; Potts, C.N.; Van Wassenhove, Luk N.

TI Local Search Heuristics for Single Machine Scheduling With Batching to Minimize Total Weighted Completion Time. AU Crauwels, H.A.J.; Potts, C.N.; Van Wassenhove, Luk N.

TI Branch and Bound Algorithms for Single Machine Scheduling With Batch Set-Up Times to Minimize Total Weighted Completion Time. AU Crauwels, H.A.J.; Hariri, A.M.A.; Potts, C.N.; Van Wassenhove, Luk N.

**Powell, Alan A.**

PD September 1995. TI From Dornbusch to Murphy: Stylized Monetary Dynamics of a Contemporary Macroeconometric Model. AA Monash University. SR Monash University, Department of Econometrics Working Paper: 13/95; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. PG 29. PR no charge. JE C50, E47, E52. KW Monetary Dynamics. Macroeconometric Model. Dornbusch Model. Overshooting Exchange Rates.

AB Dornbusch's 1976 overshooting exchange rate model (hereafter, DBM) has long been known to under pin the Murphy Model (MM), yet the dynamic adjustment paths of variables in MM differ markedly from those in DBM. A leading case in point is the exchange rate which in MM actually undershoots its new equilibrium value after the injection of a monetary shock. This paper gives a simplified account of how this comes about. The emphasis is not so much on theoretical rigor but on providing a convincing practical demonstration.

Using the simplest form of DBM as a starting point, it is shown how one can progressively develop a miniature model exhibiting an MM-like response to a monetary shock. The key idea in this development is that aggregate demand does not respond instantaneously to shocks in the macroeconomic environment. The vehicle used to implement the numerical miniature model is a computer spreadsheet.

**Pradhan, Mahmood**

TI Financial Indicators and Financial Change in Africa and Asia. AU Pill, Huw; Pradhan, Mahmood.

**Prasad, Eswar**

PD November 1995. TI Skill Heterogeneity and Aggregation Bias over the Business Cycle. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/122; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 17. PR not available. JE E32, D51, J31. KW Dynamic Models. Skill Heterogeneity. Wage Fluctuations.

AB This paper extends the equilibrium business cycle framework to incorporate ex ante skill heterogeneity among workers. Consistent with the empirical evidence, skilled and unskilled workers in the model face the same degree of cyclical variation in real wages although unskilled workers are subject to substantially higher procyclical variation in employment. Systematic cyclical changes in the average skill level of employed workers are shown to induce bias in aggregate measures of cyclical variation in the labor input, productivity, and the real wage. The introduction of skill heterogeneity improves the model's ability to match the empirical correlation between total hours and the real wage but the correlation between total hours and labor productivity remains higher than in the data.

**Pratten, Cliff**

PD March 1996. TI The New Audit Exemption Regime. AA University of Cambridge. SR University of Cambridge, Discussion Papers in Accounting and Finance: AF21; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 33. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE K23, L51, M41. KW Audit Exemption. Small Companies. UK.

AB The Research Board of the Institute of Chartered Accountants commissioned this study of the new rules for audit exemption for small companies, which were introduced in 1994. The study was based on two surveys using questionnaires to obtain the views of practitioners and the directors of companies about the new audit exemption regime. The conclusions of the study were that the effects of audit exemption have been beneficial. Companies have obtained a small saving in costs and have not suffered any adverse consequences. The main caveat to this conclusion was that at the time the study was made it was not possible to assess the long-term effects of audit exemption.

**Price, L.J**

PD September 1995. TI The Joint Effects of Brands and Warranties in Signaling New Product Quality. AU Price, L.J.; Dawar, N. AA Price: Hong Kong University. Dawar: INSEAD. SR INSEAD, Working Papers: 95/86/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305

Cedex, FRANCE. PG 43. PR not available. JE M11, L14, L15. KW Product Quality. Brands. Warranties. Signaling Theory. Product Management.

AB An integrative review of signaling theory literature pertaining to brand reputations and warranties serves as the basis for hypothesizing about the joint effects of the two quality signals on consumers' perceptions of product quality, as well as their intentions to purchase. Although prior research largely treats brands and warranties separately, tending to stress the superiority of brand signals over warranties, we identify conditions under which the two signals interact to determine consumer evaluations. In addition, we find evidence that the dimensions along which quality judgments are made by consumers in response to warranty signals may depend on the strength of a brand's reputation. The latter effect suggests that consumers do not always interpret the two signals independently. Findings are discussed in terms of their fit with signaling theory assumptions as well as their implications for product management.

TI A Cross-Cultural Study of Interpersonal Information Exchange. AU Dawar, N.; Parker, Philip M.; Price, L.J.

#### Proulx, Chris

TI Hard Bargains and Lost Opportunities. AU Binmore, Ken; Proulx, Chris; Samuelson, Larry; Swierzbinski, Joe.

#### Prusa, Thomas J.

TI Cumulation and ITC Decision-Making: The Sum of the Parts is Greater Than the Whole. AU Hansen, Wendy L.; Prusa, Thomas J.

TI Product Development and the Timing of Information Disclosure Under U.S. and Japanese Patent Systems. AU Aoki, Reiko; Prusa, Thomas J.

#### Psaradakis, Zacharias

PD June 1995. TI Regression Based Tests for Persistence in Conditional Variances. AU Psaradakis, Zacharias; Tzavalis, Elias. AA Psaradakis: Bristol University. Tzavalis: University of Exeter. SR University of Exeter, Department of Economics Discussion Paper: 95/01; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 27. PR no charge. JE C12, C22. KW Conditional Heteroskedasticity. Nonlinear. GARCH. Persistence. Regime Changes. Unit Roots.

AB This paper considers regression-based test criteria for testing the hypothesis of conditional variance nonstationarity in the logarithmic family of GARCH processes. The tests are based on the ARMA representations that appropriate nonlinear transformations of GARCH-type processes admit. Simulation experiments investigate the performance of the tests in finite samples, both in the presence and absence of a structural change in the conditional variance process. The methods are also used to test the hypothesis of integration in variance for some economic time series.

#### Pycke, Bart

TI Separating the Fads From the Facts: Trends in Manufacturing Action Programmes and Competitive Priorities From 1986 Till 1994. AU De Meyer, Arnoud; Pycke, Bart.

#### Pyke, D.F

TI The Residual Life of the Renewal Process: A Simple Algorithm. AU Baganha, M.P.; Pyke, D.F.; Ferrer, G.

TI The Undershoot of the Reorder Point: Tests of an Approximation. AU Baganha, M.P.; Pyke, D.F.; Ferrer, G.

#### Qian, Yingyi

PD September 1994. TI Regional Decentralization and the Soft Budget Constraint: The Case of China. AU Qian, Yingyi; Roland, Gerald. AA Qian: Stanford University. Roland: Universite Libre de Bruxelles. SR Centre for Economic Policy Research, Discussion Paper: 1013; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 30. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE E62, E63, H72, P31. KW China. Budget Constraint. Federalism. Decentralization. Economic Transition.

AB The majority of enterprises in China are controlled by local governments at the provincial, city, county, township and village levels. We study the effect of regional decentralization on soft budget constraints in these enterprises. We show that fiscal competition under (foreign) capital may be effective in hardening enterprises' budget constraints. Decentralization of monetary authority leads to a softening of local governments' budget constraints, however, as well as those of enterprises. Fiscal decentralization combined with monetary centralization (i.e., fiscal federalism) may achieve not only hard budget constraints but also the objective of monetary restraint. We also examine the effect of labor and product market conditions on soft budget constraints. We apply our model to explain harder budget constraints of the enterprises controlled by lower-level governments of townships and villages in China.

#### Quah, Danny

PD May 1994. TI Convergence Empirics Across Economies with (Some) Capital Mobility. AA London School of Economics. SR Centre for Economic Policy Research, Discussion Paper: 954; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 42. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE C23, F43, O47. KW Convergence. Education. Evolving Distribution. Growth. Investment. Polarization.

AB This paper reinterprets a simple model of growth and fluctuations across many economies to allow for the explicit characterization of the dynamically-evolving cross-economy distribution of income. Such a framework provides a more natural, revealing study of the convergence hypothesis. The data show limited intra-distribution mobility in incomes across economies and thus, little convergence. The analysis uncovers some "convergence club"-like dynamics, and reveals the wide diversity in growth experiences across countries. Conditioning on physical capital investment, secondary school enrollment, and a dummy for the African continent fails to overturn these characterizations.

#### Rasmussen, Bo Sandemann

PD March 1996. TI Imperfectly Competitive Factor Markets and Price Normalization. AA University of Aarhus. SR University of Aarhus, Department of Economics, Memo: 1996/5; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK/8000 Aarhus C.

DENMARK. PG 16. PR no charge. JE D50, J51. KW Imperfect Competition. General Equilibrium. Price Normalization Rules. Trade Unions. Rationality.

AB A two sector general equilibrium model with imperfectly competitive labor markets is set up. Noncooperative equilibria with wage setting at the sectoral level are shown to depend on the choice of the price normalization rule even though all agents behave fully rationally. Hence, imposing rationality is not sufficient to deprive the choice of the price normalization rule of its importance. It is argued that the importance of the choice of the price normalization rule may follow from the strategic interaction of agents and not from imperfection of competition per se, and some examples are provided.

### Rau, P.R

PD July 1995. TI Efficient Markets in the Presence of an "Irrational" Investor: The Case of the INSEAD Ball Ticket Market. AA INSEAD. SR INSEAD, Working Papers: 95/66/FIN/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 18. PR not available. JE C79, D84. KW Efficient Market. Irrational Trader. Market Collapse. Rationality Assumption.

AB An efficient market is supposed to aggregate all available and relevant information into prices. Consequently, prices change only because of the unexpected arrival of new information. This information is usually related to factors governing the supply and demand of goods in the market. This paper examines a case at a business school in Europe where one trader in a sophisticated email market announced that he was trading on ethical considerations rather than on profit maximization considerations as the others were. This seemingly irrelevant announcement caused the entire market to collapse. The paper hypothesizes that this is because the announcement made it no longer common knowledge that all market participants were rational, which caused a consequent breakdown in the market. The phenomenon emphasizes how critical is the usually unstated assumption of the common knowledge of rationality of the participants and suggests that the traditional analyses of "irrational" "noise" trader risk may not capture all the effects of irrationality.

### Rauscher, Michael

PD October 1994. TI Trade Laws and Environmental Issues in Central and East European Countries. AA Institute of World Economics. SR Centre for Economic Policy Research, Discussion Paper: 1045; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 39. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F02, Q31, Q21. KW Trade Policy. Environmental Policy. International Agreements. Central Planning.

AB International Trade and environmental regulation are interdependent. Central and East European Countries (CEECs) are now being integrated in international markets, and the question arises how environmental issues should be taken account of during this process and which institutional framework is appropriate. The first part of this paper reviews the theoretical and empirical evidence of a close link between international trade and environmental issues is not particularly strong. Another section of the paper looks at the environmental policies of the CEECs and at their comparative advantages. The main part of the paper deals with trade law and institutions that are of major importance in the context of environmental

disruptions and with environmental policy instruments and institutions that affect the patterns of trade and can be used for protectionism purposes. They are discussed in the context of the experience with existing international agreements. The major questions are: (i) how the capture of environmental regulation by protectionist interest groups can be avoided; (ii) under which circumstances the CEECs should adjust their environmental standards to West European levels; (iii) whether and when green barriers to trade should be used; (iv) what can be done to avoid harmful tax competition in the field of environmental regulation; and (v) how international disputes can be resolved.

PD November 1994. TI Environmental Regulation and the Location of Polluting Industries. AA Institute of World Economics. SR Centre for Economic Policy Research, Discussion Paper: 1032; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 13. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F12, F21, Q28. KW Environmental Policy. Capital Movements. Imperfect Competition.

AB Does international tax competition in the environmental field lead to undesirably low levels of environmental regulation and to unacceptable standards of environmental quality? The paper attempts to answer this question in a non-competitive partial-equilibrium framework. There is one firm that wishes to establish a plant in one of  $n$  countries. The paper shows that tax competition may lead to emission taxes that are either too low or too high. They may be so high that the investment is not undertaken although this would be optimal if the countries cooperated. On the other hand, taxes may be driven to zero if there are substantial transfrontier pollution effects.

### Ravn, Morten O.

PD September 1995. TI Schooling, Training, Growth and Minimum Wages. AU Ravn, Morten O.; Sorensen, Jan Rose. AA Ravn: University of Aarhus and University of Southampton. Sorensen: University of Aarhus. SR University of Aarhus, Department of Economics, Memo: 1995/14; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK/8000 Aarhus C, DENMARK. PG 22. PR no charge. JE I20, J31, O40. KW Growth. Schooling. Training. Minimum Wages.

AB In this paper we look at the long-run growth implications of labor market distortions. The analysis is cast in a model where growth is generated by two alternative sources of enhancing labor productivity. The first is that workers before entering the job market may undertake schooling. Secondly, workers may undertake training within firms as unskilled workers and thereby become skilled workers. We investigate how a minimum wage requirement for the unskilled may affect long-run growth. In general, the effects are ambiguous. Firms react to minimum wages by offering less training to the unskilled workers and this has a negative effect on growth. However, this makes workers increase their schooling level, which will tend to increase the growth rate. The net effect then depends on whether schooling or training dominates long-run increases in labor productivity.

PD March 1996. TI A Reconsideration of the Empirical Evidence on the Asymmetric Effects of Money Supply Shocks: Positive versus Negative or Big versus Small? AU Ravn, Morten O.; Sola, Martin. AA Ravn: University of

Southampton and University of Aarhus. Sola: Birkbeck College and London Business School. SR University of Aarhus, Department of Economics, Memo: 1996/4; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK/8000 Aarhus C, DENMARK. PG 29. PR no charge. JE C32, E32, E41, E52. KW Nominal Demand. Asymmetric Effects. Regime Switching.

**AB** In this paper we reconsider the empirical evidence on the possible asymmetric effects on aggregate output of changes in nominal demand. Many versions of such asymmetries are common in the theoretical literature. The particular versions of asymmetries that we will concentrate on are the following. The first is the traditional Keynesian asymmetry which is concerned with different effects of positive and negative changes in money supply stating that the former, for various reasons, are neutral, and the latter have real effects. Earlier empirical studies have found evidence in favor of this hypothesis but we argue that the results are not robust to changes in the money supply process. Using an alternative empirical technique, we argue that the evidence points instead towards asymmetric effects of big and small changes in nominal demand, i.e. that there is a non-linear relationship between nominal demand changes and output changes. The empirical results imply that big shocks are neutral but small shocks have real effects. The findings indicate that the relevance of menu cost models but also imply that the traditional Keynesian asymmetry has less empirical support.

#### Raybaudi-Massilia, Marzia

PD January 1996. TI Foreign Direct Investment and International Trade Theory. AA University of Birmingham. SR University of Birmingham, Department of Economics, Discussion Paper: 96/04; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. PG 41. PR 2 pounds. JE F21, F23, L12, L13. KW Foreign Direct Investment. Multinational Enterprise. International Trade. Industrial Organization.

**AB** This is a survey of the literature on multinational theory, focusing on its relation to the most recent international trade theory. Although the latter has experienced an impressive development in the last ten years, a comprehensive analysis of foreign direct investments is still missing. This discussion will depart from the seminal contributions of Hymer (1960) and go to the most recent developments on strategic foreign direct investment.

#### Rebelo, Sergio

TI Policy, Technology Adoption and Growth. AU Levine, Ross; Easterly, William; King, Robert; Rebelo, Sergio.

TI Business Cycles in a Small Open Economy. AU Correia, Isabel; Neves, Joao C.; Rebelo, Sergio.

#### Reed, Howard

TI Intergenerational Mobility in Britain. AU Dearden, Lorraine; Machin, Stephen; Reed, Howard.

#### Reimer, Matthias

TI Binomial Models for Option Valuation: Examining and Improving Convergence. AU Leisen, Dietmar; Reimer, Matthias.

#### Reinhart, Vincent

TI Flexible Estimation of Demand Schedules and Revenue Under Different Auction Formats. AU Feldman, Robert A.; Reinhart, Vincent.

#### Renstrom, Thomas

PD February 1996. TI Endogenous Firm Objectives. AU Renstrom, Thomas; Yalcin, Erkan. AA Renstrom: University of Birmingham; Yalcin: University of Wales, Aberystwyth. SR University of Birmingham, Department of Economics, Discussion Paper: 96/05; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. PG 20. PR 2 pounds. JE C62, D21, D42, D72. KW Imperfect Competition. Endogenous Firm Objective. Share Holder Voting.

**AB** We endogenize the objective of a monopoly firm in a general equilibrium context. Within this framework a distributional conflict occurs between shareholders, depending on their endowments. Following a political-economy approach and using voting theory, the production plan of the firm is endogenized. The economic equilibrium is characterized for distributions of shares, and we find that a privately owned monopoly may very well act as a competitive firm, while a publicly owned monopoly may not.

PD February 1996. TI Dynamic Taxation and Equivalent Tax Systems. AA University of Birmingham. SR University of Birmingham, Department of Economics, Discussion Paper: 96/06; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. PG 37. PR 2 pounds. JE D91, E62, H31, H63. KW Dynamic Taxation. Fiscal Policy. Tax Equivalence. Public Debt. Ricardian Equivalence.

**AB** The paper gives a systematic treatment of equivalent tax systems within an intertemporal framework. Proportional taxes levied on labor income, consumption expenditure and/or capital income. First a standard set up is used, where individuals receive utility from one consumption good and leisure. A range of equivalence results are derived. Next it is shown that all equivalence results break down when individuals can revise their consumption decisions slightly more often than the government can revise fiscal policy. Finally, a framework of household production is analyzed: individuals receive utility from consumption of a market good and a home produced good. Labour and capital are then divided between market production and home production. Similar equivalence results are obtained and they break down when there is a difference in timing between the individuals and the government.

PD February 1996. TI Discrete-Time Redistributive Taxation in a Continuous-Time Economy. AA University of Birmingham. SR University of Birmingham, Department of Economics, Discussion Paper: 96/07; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. PG 27. PR 2 pounds. JE H21, C73, D91, E62. KW Optimal Taxation. Fiscal Policy. Feedback Equilibria.

**AB** The paper studies optimal redistributive taxation when the government cannot commit to future policy. The framework used is one in which individuals can revise their consumption-savings decisions slightly more often than the government can change tax policy. This is modeled as individuals choosing consumption in continuous time and the government choosing

tax rates in discrete time. The government chooses consumption tax rates and capital-income tax rates according to a feedback rule. The steady-state properties of the economy are examined. The steady state consumption and welfare depend on the time interval during which fiscal policy cannot be revised. The consumption tax rate, consumption for all individuals, and welfare are higher in an economy where the government can revise policy less often. In such an economy the capital-income tax is lower.

### Restoy, Fernando

TI Volatility Transmission Along the Money Market Yield Curve. AU Huertas, Juan Ayuso; Haldane, Andrew G.; Restoy, Fernando.

TI Is Exchange Rate Risk Higher in the E.R.M. After the Widening of Fluctuation Bands? AU Huertas, Juan Ayuso; Jurado, Maria Perez; Restoy, Fernando.

### Richter, Marcel K.

TI Implicit Functions and Diffeomorphisms without Continuous Differentiability. AU Hurwicz, Leonid; Richter, Marcel K.

### Riddell, Craig

PD December 1994. TI Human Capital Formation in Canada: Recent Developments and Policy Responses. AA Canadian Institute for Advanced Research, University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 95/04; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 46. PR 20 cents per page Canadian to other than educational institutions. JE J24, J31, J38. KW Human Capital. Education. Training. Skill Formation. Labor Market Policies.

AB In recent years there has been a significant increase in interest in education and skill formation. This paper provides a broad overview of this subject in the Canadian setting. Our examination of recent labor market developments concludes that the increased emphasis being given to human capital formation is appropriate. Indeed, when the quantity (employment, labor force participation) and price (relative wages) dimensions are both examined, the recent changes affecting individuals with different levels of educational attainment and experience are dramatic. Although some of the increase premiums on education and experience can be attributed to the effects of the recessions of the early 1980's and early 1990's, these developments are also consequences of underlying structural changes such as those due to globalization and technological change. Associated with this greater attention to the skills of the workforce has been an assessment of our education and training systems. Our review of this ongoing assessment covers a wide range of topics relating to human capital formation: primary and secondary education, post-secondary education, private sector training, and government sponsored training.

TI Alternative Measures of Unemployment Based on Flow Data. AU Jones, Stephen R.G.; Riddell, Craig.

### Ritschl, Albrecht O.

PD July 1994. TI An Exercise in Futility: East German Economic Growth and Decline, 1945-89. AA University of

Munich. SR Centre for Economic Policy Research, Discussion Paper: 984; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 45. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE N14, N44, O52, P21. KW East Germany. Comparative Productivity. Socialist Planning. Autarky. Economic Transition.

AB The paper assembles and reviews data on growth performance for East Germany. Conclusions are only tentative, as data reliability is still poor. Examining factor growth and total factor productivity performance, the paper arrives at three main conclusions. First, large-scale dismantling of capital by the Soviets was outweighed by migration, such that the aggregate capital-labor ratio in East Germany around 1950 was similar to that of West Germany. Second, the record of productivity growth follows the common pattern for Western countries. The productivity slowdown set in with a delay, however, as foreign borrowing and subsidized oil imports isolated East Germany from the first oil shock. Third, when these subsidies ended and debt service mounted, East Germany ran into a debt crisis, with productivity growth becoming zero or even negative in the 1980s.

### Rob, Rafael

TI Shared Ownership and Pricing in a Network Switch. AU McAndrews, James J.; Rob, Rafael.

PD August 1995. TI The Frequency and Pricing of Product Innovations. AU Rob, Rafael; Fishman, Arthur. AA Rob: INSEAD. Fishman: Tel Aviv University. SR INSEAD, Working Papers: 96/09/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 29. PR not available. JE D42, D43, O31, O32. KW Product Innovation. Research and Development. Durable Goods.

AB This paper constructs and analyzes an economic model of repeated product innovations in which the introduction of one product forms the base from which the development of the next product will start. The innovation process depends both on the flow of R&D expenditures and on the length of time over which they accrue. The products are durable, so although products become technologically obsolete due to the introduction of new and superior products, consumers need not replace the products they already possess. We determine rational expectations equilibria under the monopoly and the duopoly regimes, and we use them to interpret a vast body of empirical literature which documents the frequency of innovations of various durable goods, changes in their quality adjusted prices, and how these variables vary in a cross section of products and over time. The model shows that the decentralized market equilibria are inefficient. We also analyze the effect of various policy instruments, including output taxes or subsidies and patent limitations, which can be used to remedy the inefficiencies.

### Robertson, Thomas S.

PD 1995. TI Development Mode: A Transaction Cost Conceptualization. AU Robertson, Thomas S.; Gatignon, Hubert. AA Robertson: London Business School. Gatignon: INSEAD. SR INSEAD, Working Papers: 95/65/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 27. PR not available. JE O31, O32. KW Technology Alliance. Research and Development. Transaction Costs.

AB Technology alliances have emerged in the past decade as

a significant mode of innovation development. The present research assesses: (1) factors explaining whether firms will engage in technology alliances or utilize the more traditional mode of internal R&D and (2) the market success rate of innovation development depending on the mode selected. The hypotheses stem from a transaction cost conceptualization. The results are encouraging in identifying factors which relate to the selection of a technology development mode and the success rate of each mode. Firms which pursued a technology alliance in line with the model's predictions achieved higher market success rates.

**TI** Incumbent Defense Strategies Against New Product Entry. AU Gatignon, Hubert; Robertson, Thomas S.; Fein, Adam J.

### Rodrik, Dani

**PD** October 1994. **TI** What Does the Political Economy Literature on Trade Policy (Not) Tell Us That We Ought to Know? AA Columbia University. SR Centre for Economic Policy Research, Discussion Paper: 1039; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 44. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F13, F02, F11. KW Political Economy. Trade Policy.

**AB** Three questions lie at the core of the large and distinguished literature on the political economy of trade policy. First, why is international trade not free? Second, why are trade policies universally biased against (rather than in favor of) trade? Third, what are the determinants of the variation in protection levels across industries, countries, and institutional contexts? These questions are handled only imperfectly by the existing literature. Current models treat trade policy as a redistributive tool, but do not explain why it emerges in political equilibrium in preference over more direct policy instruments. Further, existing models do not generate a bias against trade, implying that pro-trade interventions are as likely as trade-restricting interventions. The greatest contribution of the political economy literature may lie in developing a better grasp of normative economic analysis -- that is, in helping design policies, rules, and institutions.

### Rola, Paula

**TI** How Much Does Hiring and Firing Cost? Survey Evidence From Italy. AU Del Boca, Alessandra; Rola, Paula.

### Roland, Gerald

**TI** Regional Decentralization and the Soft Budget Constraint: The Case of China. AU Qian, Yingyi; Roland, Gerald.

### Roller, Lars-Hendrik

**TI** Collusive Conduct in Duopolies: Multimarket Contact and Cross-Ownership in the Mobile Telephone Industry. AU Parker, Philip M.; Roller, Lars-Hendrik.

**TI** Capacity Pricing Under Uncertainty. AU Kende, M.; Roller, Lars-Hendrik.

### Ros, Jaime

**PD** August 1995. **TI** Dynamic Effects of Trade Liberalization and Currency Overvaluation Under Conditions of Increasing Returns. AU Ros, Jaime; Skott, Peter. AA Ros: University of Notre Dame. Skott: University

Aarhus. SR University of Aarhus, Department of Economics, Memo: 1995/8; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK/8000 Aarhus C, DENMARK. PG 26. PR no charge. JE F12, F13, F31. KW Trade Liberalization. Overvaluation. Increasing Returns. Non-Traded Goods. Corridor Stability.

**AB** This paper examines the dynamic implications of a shift in relative prices between traded and non-traded goods. In accordance with empirical evidence we allow for sluggish wage adjustment and the presence of increasing returns to scale in the traded goods sector. The existence of increasing returns to scale gives rise to the possibility of multiple equilibria, and with multiple equilibria trade, liberalization and the associated short-run changes in relative prices can have long-term, real consequences. It may leave the economy outside a "corridor of stability" and lead to a cumulative process of contraction of the capital stock. The likelihood of this happening increases in the case of radical and abrupt trade liberalization which is unaccompanied by currency devaluation. A number of trade liberalization experiences (including those of Chile from 1974 to 1982 and Mexico from 1988 to the present crisis) illustrate in practice the dangers highlighted by the model.

### Rosenbluth, Gideon

**PD** November 1995. **TI** Interprovincial Migration and the Efficacy of Provincial Employment Creation. AA University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 95/45; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 21. PR 20 cents per page Canadian to other than educational institutions. JE J61, J68, J64. KW Regional Provincial Migration. Employment. Unemployment.

**AB** This paper addresses an issue of considerable importance and interest for provincial economic policies: To what extent can a provincial government reduce unemployment by policies that raise provincial GDP? In particular, to what extent can the reduction of unemployment be frustrated by interprovincial migration? These issues are examined through a system of equations that model the interaction between Canadian interprovincial migration and provincial employment, unemployment, wage rates, output, population, and labor force. The parameters of the equations are estimated from statistics for the years 1966 to 1981. The model is used in simulation exercises which investigate: i) the effectiveness of employment creation in one province in reducing unemployment in that province, and ii) the extent to which migration reduces interprovincial differentials of wage rates and unemployment rates. The results suggest that: i) the dissipation of unemployment reduction through migration is relatively muted and slow; and ii) migration is not effective in reducing overall interprovincial inequality in unemployment rates and wage rates, though it changes the rankings. In conclusion, the effects of interprovincial migration do not eliminate the potential for growth-oriented policies of an individual province to reduce unemployment in that province.

### Ross, Jr. W.T

**PD** June 1995. **TI** Performance in Principal-Agent Dyads: The Causes and Consequences of Perceived Asymmetry of Commitment to the Relationship. AU Ross, Jr. W.T.;



Anderson, E.; Weitz, B. AA Ross: Temple University. Anderson: INSEAD. Weitz: University of Florida. SR INSEAD, Working Papers: 95/53/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 42. PR not available. JE C71, D82, G22. KW Principal-Agent. Insurance. Asymmetric Commitment.

**AB** We focus on the principal-agent relationship in a distribution channel. In a services context (insurance), we examine how two facets of performance, from the point of view of both the principal and the agent, are influenced by the perceiver's belief that it is more committed to the relationship than is the other party. Using primary data from 255 insurance agent-insurance provider dyads, we show that each side's assessment of how much it benefits from the dyad is related in a potentially dysfunctional manner to its perception of asymmetric commitment. Perceivers rate their performance outcomes from the dyad (i.e. harmony and profit) highest when they believe they are less committed than their counterpart. Conversely, they rate their own performance outcomes lowest when they believe they are more committed than the other party. We explain this finding in terms of suspected opportunism and offer a partial test of this explanation compared to explanations from theories of equity and power/dependence. Further, we demonstrate that each party's perception of asymmetric commitment partially reflects actual asymmetry, as measured by confidential data collected from both sides. Perceived asymmetric commitment is also shown to be related to levels of communication and dependence in the dyad. Managerial implications for reducing perceived asymmetric commitment and improving the performance outcomes of each dyad member are discussed.

**Rossell, G.**

TI Finding the High Flying Entrepreneurs: A Cautionary Tale. AU Birley, S.; Muzyka, Daniel F.; Dove, C.; Rossell, G.

**Rothblum, Uriel G.**

PD December 1995. TI Optimal Search on a Stochastic Tree With an Application to Multi- Phased R&D Scheduling. AU Rothblum, Uriel G.; Van der Heyden, Ludo. AA Rothblum: Israel Institute of Technology. Van der Heyden: INSEAD. SR INSEAD, Working Papers: 96/05/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 42. PR not available. JE D83, O32. KW Stochastic Tree. Search Theory. Stochastic Routing. Stochastic Scheduling. R&D Scheduling.

**AB** We consider the problem of determining a path of feasible edges from the root of a directed tree to any one of its endpoints so as to minimize the expected search cost. Each edge in the tree is characterized by an exploration cost and a feasibility probability. When an edge is explored and found unfeasible, all paths using this edge become unfeasible too, and other paths must be looked for. An algorithm for solving the problem is provided. The obtained solution exhibits the dynamic aspect of searches in this setting. In particular, one may encounter repeated jumping between different parts of the tree. This model was motivated by the problem of determining an optimal schedule for an R&D project presenting several options where each can be decomposed into multiple phases satisfying precedence relationships. The model's solution demonstrates that in such situations the optimal R&D schedule

exhibits a parallel, adaptive structure: at any moment in the search, several options might be "at hand" and might in turn be reactivated as unfeasibility is revealed among certain of these options.

**Ruhm, Christopher J.**

PD March 1995. TI Parental Leave Policies in Europe and North America. AU Ruhm, Christopher J.; Teague, Jacqueline L. AA Ruhm: University of North Carolina Greensboro and National Bureau of Economic Research. Teague: Center for Economic Research. SR National Bureau of Economic Research, Working Paper: 5065; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 21. PR \$5.00. JE J22, J32. KW Family Leave. Efficiency. Paid Leave.

**AB** Despite widespread international implementation, limited information is currently available on the economic impact of mandated family leave policies. This paper increases our understanding of the nature and effects of parental leave entitlements in several ways. First, we provide a brief history of family leave legislation in Europe and North America and summarize arguments relating to the efficiency and incidence of mandated leave. Second, we have constructed a longitudinal data set detailing durations of job-protected leave in 17 countries, during 1960- 89 period, and use this information to examine recent trends in the regulations. The data indicate that family leave durations grew rapidly during the decade of the 1970s, with more modest increase since that time. Third, we provide an exploratory investigation of the relationship between mandated leave policies and macroeconomic outcomes. The econometric estimates provide little support for the view that moderate periods of parental leave reduce economic efficiency but rather hint at a modest beneficial impact, particularly when considering paid time off work.

**Rumelt, Richard P.**

PD August 1995. TI The Nature of the Large Corporation. AU Rumelt, Richard P.; Stopford, John M. AA Rumelt: INSEAD. Stopford: London Business School. SR INSEAD, Working Papers: 96/06/SM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 31. PR not available. JE L22. KW Large Corporations. Corporation Organization. C-Logic. M-Logic. Full-Fledged M-Form.

**AB** The large corporation is the productive engine of the modern industrial world. The contemporary view of the corporation sees it not as an agglomeration of assets or contracts, but as a holder of specialized resources-rights, reputations, routines, and competencies. The very size of large corporations signals the presence of unusual concentrations of these specialized resources. The corporation's organization is both the repository of special competencies and the agent for the creation of new resources. Hence the critical distinctive feature of the modern large corporation is its organizational form. We are presently in a period in which the "ideal" organizational form (or forms) is in flux. Fifteen to twenty years ago there was general agreement in Western countries that the Full-Fledged M-form represented an "ideal" towards which most large corporations ought to strive. The dominant managerial logic was based on efficiencies gained through control (C-Logic). Simultaneously, in Japan an alternative ideal form evolved, emphasizing the values of problem-solving at low levels in the organization, extensive coordination,

experimentation and organizational learning (L-Logic). The market for corporate control in Anglo-Saxon countries, and the general trends of globalization, deregulation, and technological advance have, however, forced a collision between the two and broken yesterday's consensus and sense of certainty in both the East and the West. Collision has spurred large firms towards dramatic internal transformations. In the West, these have commonly included moves to flatten the organization, re-centralize the overall strategic direction and emphasize goals other than profits, to increase coordination as well as operating autonomy for business-unit results, to rely more on working-level problem-solving and to leverage capabilities by identifying and disseminating best-practice within the firm. In Japan, there have been similar moves, but often seemingly in the opposite direction. There are efforts to increase profit consciousness and the discipline of hierarchical controls as well as to lower total costs by a combination of further technical advance and accelerated internationalization. In both cases, the elements of transformation are seldom all in harmony with one another and large firms are now experimenting to discover which combinations are effective.

#### Runggaldier, W.J

TI Convergence of Option Values under Incompleteness.  
AU Schweizer, Martin; Runggaldier, W.J.

#### Sadrieh, Abdolkarim

TI RatImage-Research Assistance Toolbox for Computer-Aided Human Behavior Experiments. AU Abbink, Klaus; Sadrieh, Abdolkarim.

TI RatDemo-A Ready-to-Run Experiment in 99 Program Lines. AU Abbink, Klaus; Sadrieh, Abdolkarim.

#### Saint-Paul, Gilles

TI Uneven Technical Progress and Job Destructions.  
AU Cohen, Daniel; Saint-Paul, Gilles.

PD July 1994. TI The Dynamics of Exclusion and Fiscal Conservatism. AA DELTA. SR Centre for Economic Policy Research, Discussion Paper: 998; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 36. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE E62, J24, J62, O15. KW Political Economy. Income Distribution. Human Capital. Poverty. Exclusion.

AB This paper studies the impact of income inequality on fiscal conservatism when an increase in inequality affects the bottom portion of income distribution. It is argued that, contrary to what is generally assumed in the economic literature, inequality will then be associated with less, rather than more, redistributive taxation. Furthermore, if the poor are liquidity constrained then the positive association between inequality and fiscal conservatism will increase the persistence in the dynamics of income distribution and possibly lead to multiple steady states. The existence, under some conditions, of a dynamic voting equilibrium is shown and some of its properties are studied.

#### Saito, Makoto

TI Precautionary Saving, Growth, and Welfare: A Cross-Country Study. AU Jitsuchon, Somchai; Saito, Makoto.

#### Sala-I-Martin, Xavier

TI Capital Mobility in Neoclassical Models of Growth. AU Barro, Robert J.; Mankiw, N. Gregory; Sala-I-Martin, Xavier.

PD September 1994. TI A Positive Theory of Social Security. AA Yale University. SR Centre for Economic Policy Research, Discussion Paper: 1025; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 40. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE H53, H55, I38. KW Social Security. Pensions. Human Capital. Growth.

AB Social Security programs around the world link public pensions to retirement: people do not lose their pensions if they make a million dollars a year in the stock market, but they do confront marginal tax rates of up to 100 percent if they choose to work. After arguing that most existing theories cannot explain this fact, I construct a positive theory which is consistent with it. The main idea is that pensions are a means to induce retirement, that is, to buy the elderly out of the labor force. The reason is that aggregate output is higher if the elderly do not work. This is modelled through positive externalities in the average stock of human capital: because skills depreciate with age, the elderly have lower than average skills and, as a result, they have a negative effect on the productivity of the young. When the difference between the skill level of the young and that of the old is large enough, aggregate output in an economy where the elderly do not work is higher. Retirement is desirable in this case, and social security transfers are the means by which such retirement is induced. The theory developed in this paper is also shown to be consistent with a number of other regularities.

#### Salomon, Marc

PD 1996. TI Solving the Discrete Lotsizing and Scheduling Problem With Sequence Dependent Set-Up Costs and Set-Up Times Using the Travelling Salesman Problem With Time Windows. AU Salomon, Marc; Solomon, Marius M.; Van Wassenhove, Luk N.; Dumas, Yvan; Dauzere-Peres, Stephane. AA Salomon: Erasmus University. Solomon: Northeastern University and GERAD. Van Wassenhove: INSEAD. Dumas: AD-OPT Technologies. Dauzere-Peres: Ecole des Mines. SR INSEAD, Working Papers: 96/02/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 26. PR not available. JE C61, D24. KW Lotsizing. Sequencing. Dynamic Programming.

AB In this paper we consider the Discrete Lotsizing and Scheduling Problem with sequence dependent set-up costs and set-up times (DLSPSD). DLSPSD contains elements from lotsizing and from job scheduling, and it is known to be NP-Hard. An exact solution procedure for DLSPSD is developed, based on a transformation of DLSPSD into a Traveling Salesman Problem with Time Windows (TSPTW). TSPTW is solved by a novel dynamic programming approach due to Dumas et al. (1993). The results of a computational study show that the algorithm is the first one capable of solving DLSPSD problems of moderate size to optimality with a reasonable computational effort.

#### Samuelson, Larry

TI Hard Bargains and Lost Opportunities. AU Binmore, Ken; Proulx, Chris; Samuelson, Larry; Swierzbinski, Joe.

PD July 1995. TI A dynamic Model of Equilibrium

Selection in Signaling Markets. AU Samuelson, Larry; Noeldeke, Georg. AA Samuelson: University of Wisconsin. Noeldeke: University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/322; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 32. PR no charge. JE C72, D82, D83. KW Signaling Market. Dynamic Process. Separating Equilibrium.

AB In his work on market signaling, Spence proposed a dynamic model of a signaling market in which a buyer revises prices in light of experience and sellers choose utility-maximizing signals given these prices. Spence also suggested that subjecting the dynamic process to rare perturbations might allow one to choose between multiple equilibria. This paper examines the effect of introducing such perturbations into Spence's dynamic model. We find that refinement results arise naturally from the dynamic analysis. In a broad class of markets, our model selects a separating equilibrium outcome if and only if the equilibrium outcome satisfies a version of the undefeated equilibrium concept, whereas a pooling equilibrium outcome is selected if and only if the equilibrium outcome is both undefeated and satisfies Cho and Sobel's D1.

#### Sandmann, Klaus

TI The Pricing of Asian Options under Stochastic Interest Rates. AU Nielsen, J. Aase; Sandmann, Klaus.

TI Security Linked Life Policies Under Stochastic Interest Rates. AU Nielsen, J. Aase; Sandmann, Klaus.

#### Sapir, Andre

PD September 1994. TI The Europe Agreements: Implications for Trade Laws and Institutions. Lessons from Hungary. AA Universite Libre de Bruxelles. SR Centre for Economic Policy Research, Discussion Paper: 1024; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 25. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F13, F14, F15. KW Regional Integration. EC. Eastern Europe.

AB Trade liberalizations in Czechoslovakia, Hungary and Poland was accomplished in record time between 1989 and 1991. Sustainability became, however, a major concern in Central and Eastern Europe as the "honeymoon of trade liberalization" ended in 1991/2. The paper examines whether Europe Agreements (EAs) offer a credible mechanism to help in tying the hands of governments in favor of liberal trade policies. The focus is entirely on Hungary. The paper analyzes trade policy formulation in Hungary and evaluates the actual constraint imposed by the EAs. It also examines the actual implementation of trade policies by Hungary vis-a-vis imports from the European Union and third countries. The paper concludes that the Hungarian experience suggests that EAs can be successful in sustaining trade liberalization in Central and Eastern Europe.

PD November 1994. TI The Impact of Exchange Rate Fluctuations on European Union Trade. AU Sapir, Andre; Sekkat, Khalid; Weber, Axel A. AA Sapir and Sekkat: Universite Libre de Bruxelles. Weber: Universitat Bonn. SR Centre for Economic Policy Research, Discussion Paper: 1041; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 41. PR 1

pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F12, F31, L16. KW Exchange Rates. Volatility. Misalignments. Trade. EMS.

AB The impact of exchange rate fluctuations on international trade has long been a major concern for policy-makers. This is particularly the case in Europe, where countries trade extensively with each other. The crisis that began in the Summer of 1992 generated increases exchange rate fluctuations and, therefore, renewed concerns about consequences for trade inside the European Union (EU). This report assesses the likely impact of the exchange rate crisis on trade flows inside and outside the Union. The analysis indicates the need to distinguish between short-term oscillations (i.e. volatility) and medium-term fluctuations (i.e. misalignment). We find that the recent ERM crisis is likely to have had some negative impact on trade within the region, but this impact is probably quite small.

#### Sarel, Michael

PD November 1995. TI Relative Prices, Economic Growth and Tax Policy. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/113; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 16. PR not available. JE E22, O41, H21. KW Growth. Investment. Optimal Taxation.

AB This paper examines the role of relative prices in economic growth and the possibility that relative prices are (or can be) partly determined by tax policy. In the opening section, the paper links relative prices to tax policy. Using an extension to a standard model of economic growth, it demonstrates that under certain conditions a simple tax policy, that determines the relative price of investment, can affect the investment rate and the permanent growth rate of the economy. The paper develops a method to obtain consistent data on relative prices for a large set of countries. Using these data in cross-country regressions, it examines how economic growth is affected by relative prices. The results of these empirical tests identify the relative prices as a key factor affecting investment and growth.

#### Sargent, Timothy C.

TI Unemployment Insurance and Job Durations: Seasonal and Non-Seasonal Jobs. AU Green, David A.; Sargent, Timothy C.

#### Sarvary, M.

PD December 1994. TI Marketing Information: A Competitive Analysis. AU Sarvary, M.; Parker, Philip M. AA INSEAD. SR INSEAD, Working Papers: 95/51/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 45. PR not available. JE L11, L86, M31. KW Information Sales. Competitive Strategy. Complements. Substitutes.

AB See the abstract for Sarvary and Parker (1995), INSEAD Working Papers, 96/01/MKT.

PD December 1995. TI Marketing Information: A Competitive Analysis. AU Sarvary, M.; Parker, Philip M. AA INSEAD. SR INSEAD, Working Papers: 96/01/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 27. PR not available. JE L11, L86, M31. KW Information Sales. Competitive Strategy. Complements. Substitutes.

AB This paper proposes a simple framework to investigate competition when the product sold is information. In

information markets, consumers have the option to combine products from different sellers to obtain a more accurate view of the world. In order to find the optimal number of products to buy, consumers take into account the relations (perceived correlations) among the different products, as well as their price and perceived reliability (quality). Our paper shows that firms' anticipation of consumer information acquisition strategies leads to interesting forms of competition. In particular, we show that under reasonable conditions, an information seller is better off facing competition than being a monopolist, and collusion in price among sellers can increase consumer surplus as well as profits.

#### Satchell, S. E.

TI On the Characteristics of the Measures of Risk in Finance. AU Eftekhari, B.; Satchell, S. E.

TI International Investors' Exposure to Risk in Emerging Markets: a Study Within and Between Major Currencies. AU Eftekhari, B.; Satchell, S. E.

TI Rebalancing Portfolios: Some Analytical Results with Applications to Emerging and Mature Markets. AU Leigh, M.; Satchell, S. E.

#### Saunders, A.

TI European Financial Market Integration: The Problem of Clearance and Settlements. AU Walter, I.; Saunders, A.; Giddy, I.

TI Barriers to European Financial Market Integration: Clearance and Settlement of Equities. AU Giddy, I.; Saunders, A.; Walter, I.

#### Savastano, Miguel A.

PD January 1996. TI Dollarization in Latin America: Recent Evidence and Some Policy Issues. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 96/4; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 20. PR not available. JE F41, F31, F33. KW Foreign Exchange. Currency. Latin America.

AB This paper examines the pattern of dollarization in Latin America, focusing on the experience of five countries (Argentina, Bolivia, Mexico, Peru and Uruguay) during 1970-1993. It presents evidence on the relative size of dollarization, the allocation of foreign currency deposits, and the behavior of money velocity. The discussion stresses the role of institutional factors, macroeconomic conditions, and the dynamics of money demand in shaping the dollarization process; it also highlights the shortcomings of indicators frequently employed to analyze the phenomenon. The paper provides a brief critical assessment of the empirical literature on dollarization, and identifies areas where further research seems warranted.

#### Scacciavillani, Fabio

PD November 1995. TI Exchange Rate Movements, Inflation Expectations, and Currency Substitution in Turkey. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/111; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 12. PR not available. JE E41, F41, O53. KW Currency Substitution. Turkey. Foreign Exchange.

AB This paper contains an empirical analysis of currency

substitution in Turkey: a simple relationship between the share of foreign currency holding in M2X on one side and movements in the exchange rate or inflation on the other is derived from a two-stage portfolio choice model. This relationship is estimated by band spectrum regression which allows to remove from the data the short-term cyclical components. The results show that the relationship between currency substitution depends mainly on long-term movements in the exchange rate, while the effect of inflation on currency substitution is not statistically significant.

#### Scaromozzino, Pargnale

PD July 1995. TI Uncertainty and Endogenous Selection of Macroeconomic Equilibrium. AU Scaromozzino, Pargnale; Vulkan, Nir. AA Scaromozzino: University of London. Vulkan: University College London. SR University College London Discussion Paper: 95/07; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG 22. PR 3 Pounds; checks payable to Department of Economics, University College London. JE C70, E13, D52. KW Microfoundations. Coordination Failure. Equilibrium Selection.

AB This paper presents a model of macroeconomic coordination failures based on market power and local oligopoly. The economy exhibits a multiplicity of Pareto-ranked equilibria. We show that the introduction of uncertainty about the competitive advantage of firms generates an endogenous equilibrium selection process, due to a strategic use of information by firms. This suggests a possible solution for coordination problems in macroeconomic models with multiple equilibria.

#### Schiantarelli, Fabio

TI Monetary Instability, the Predictability of Prices and the Allocation of Investment: An Empirical Investigation Using UK Panel Data. AU Beaudry, Paul; Caglayan, Mustafa; Schiantarelli, Fabio.

#### Schiermeyer, Ingo

PD January 1995. TI An Approximation Algorithm for 3-Colourability. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: 95840; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 9. PR no charge. JE C44, C61. KW Graph. K-Colouring. Exact and Approximation Algorithm. Complexity.

AB We present a polynomial time approximation algorithm to color a 3-colorable graph. We also discuss np-completeness and number-completeness of restricted k-Colorability problems.

#### Schlag, Karl H.

TI On the Interpretation of Evolutionarily Stable Sets. AU Balkenborg, Dieter; Schlag, Karl H.

TI Evolutionary Stability in Asymmetric Population Games. AU Balkenborg, Dieter; Schlag, Karl H.

TI Dynamic Stability in Perturbed Games. AU Cressman, R.; Schlag, Karl H.

TI The Dynamic (In)stability of Backwards Induction. AU Cressman, R.; Schlag, Karl H.

PD February 1996. TI Why Imitate, And If So, How? A

Bounded Rational Approach to Multi-Armed Bandits. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich. Discussion Paper: B/361; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 33. PR no charge. JE C72, C79. KW Social Learning. Bounded Rationality. Imitation. Multi-Armed Bandit. Replicator Dynamic.

AB We consider the situation in which individuals in a finite population must repeatedly choose an action yielding an uncertain payoff. Between choices, each individual may observe the performance of one other individual. We search for rules of behavior with limited memory that increase expected payoffs for any underlying payoff distribution. It is shown that the rule that outperforms all other rules with this property is the one that specifies imitation of the action of an individual that performed better with a probability proportional to how much better she performed. When each individual uses this best rule, the aggregate population behavior can be approximated by the replicator dynamic.

PD March 1996. TI Which One Should I Imitate. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich. Discussion Paper: B/365; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 17. PR no charge. JE C72, C79. KW Social Learning. Multi-Armed Bandit. Imitation. Aggregate Monotone Dynamic.

AB We consider the model of social learning by Schlag. Individuals must repeatedly choose an action with a multi-armed bandit. We assume that each individual observes the outcomes of two other individuals' choices before her own next choice must be made-the original model only allows for one observation. Selection of optimal behavior yields a variant of the proportional imitation rule-the optimal rule based on one observation. When each individual uses this rule then the adaptation of actions in an infinite population follows an aggregate monotone dynamic.

### Schmidt, Christoph M.

PD May 1994. TI The Economic Performance of Germany's East European Immigrants. AA Universitat Munchen. SR Centre for Economic Policy Research, Discussion Paper: 963; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 22. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE J15, J24, J31, J61. KW Migration. Refugees. Assimilation. Segmented Labor Markets. Germany.

AB Germany experienced a substantial influx of German immigrants from Eastern Europe after World War II and expects several million more as a consequence of the demise of socialism. This paper analyzes the economic performance of ethnic German migrants to West Germany in comparison with native born West Germans. Ethnic German immigrants from Eastern Europe display lower levels of education, lower rates of self-employment and higher unemployment rates than natives and immigrants from East Germany. Similar to foreign guest-workers, German immigrants are more likely to work in blue collar jobs; they do, however, eventually reach earnings parity with native Germans. This study therefore demonstrates, in contrast to analyses of the economic performance of guest-workers, that despite substantial persistence in economic

stature, the German economy does not exclude immigrants from economic prosperity.

### Schmidt, Klaus M.

PD March 1995. TI Incomplete Contracts and Privatization. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich. Discussion Paper: A/480; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 14. PR no charge. JE L33, L14. KW Incomplete Contracts. Privatization. Regulation. Budget Constraint.

AB The paper offers a selective survey on the incomplete contracts approach to privatization. Furthermore, a simple model of privatization to an owner-manager is developed in which different allocations of ownership rights lead to different allocations of inside information about the firm which in turn affect allocative and productive efficiency. In this model, privatization is a commitment device of the government to credibly reward the manager for a successful cost reduction and to harden his budget constraint.

### Schmidt, Peter

TI The Minimum Distance Estimator for Fractionally Integrated ARMA Models. AU Chung, Ching-Fan; Schmidt, Peter.

### Schmidt-Bleek, F.

TI Eco-Restructuring: The Transition to an Ecologically Sustainable Economy. AU Ayres, Robert U.; Schmidt-Bleek, F.

### Schneider, S.

TI Organizational Learning In East-West Joint Ventures: The Role of HRM. AU Cyr, D.J.; Schneider, S.

### Schnitzer, Monika

TI Creating Creditworthiness Through Reciprocal Trade. AU Marin, Dalia; Schnitzer, Monika.

### Schuknecht, Ludger

TI The Growth of Government and the Reform of the State in Industrial Countries. AU Tanzi, Vito; Schuknecht, Ludger.

### Schultz, Christian

PD 1996. TI Political Competition and Polarization. AA University of Copenhagen. SR University of Copenhagen, Institute of Economics, Discussion Paper: 96/04; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. PG 28. PR not available. JE D72, D82. KW Political Competition. Polarization. Public Goods. Information.

AB This paper considers political competition and the consequences of political polarization when parties are better informed about how the economy functions than voters are. Specifically, parties know the cost of producing a public good, voters do not. An incumbent's choice of policy acts like a signal for costs before an upcoming election. It is shown that the more polarized the political parties the more distorted is the incumbent's policy choice.

PD 1996. TI Announcements and Credibility of Monetary Policy. AA University of Copenhagen. SR University of Copenhagen, Institute of Economics,

Discussion Paper: 96/07; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, DENMARK. PG 11. PR not available. JE C73, D78, E52. KW Monetary Policy. Repeated Games.

AB An infinitely repeated monetary policy game a la Barro and Gordon (1983) is considered. Before the game starts the government announces a policy rule. If there is a slight probability that government is honest and a slight probability that the government makes mistakes, then a sufficiently patient government will have average loss close to its commitment loss in all sequentially rational equilibria of the infinitely repeated game.

### Schwaerzler, Werner

TI The Delta-Sum of Matching Delta-Matroids. AU Bouchet, Andre; Schwaerzler, Werner.

TI Using the Generalized Assignment Problem in Scheduling the ROSAT Space Telescope. AU Nowakowski, Joerg; Schwaerzler, Werner; Triesch, Eberhard.

### Schweizer, Martin

PD 1995. TI Convergence of Option Values under Incompleteness. AU Schweizer, Martin; Runggaldier, W.J. AA Schweizer: University of Bonn and TU Berlin. Runggaldier: University of Padua. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/333; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 18. PR no charge. JE G13, D81. KW Option Pricing. Incomplete Markets. Convergence. Minimal Martingale Measure. Jump Diffusion.

AB We study the problem of convergence of discrete-time option values to continuous-time option values. While previous papers typically concentrate on the approximation of geometric Brownian motion by a binomial tree, we consider here the case where the model is incomplete in both continuous and discrete time. Option values are defined with respect to the criterion of local risk-minimization and thus computes expectations under the respective minimal martingale measures. We prove that for a jump-diffusion model with deterministic coefficients, these values converge; this shows that local risk-minimization possesses an inherent stability property under discretization.

PD November 1995. TI Approximating Pricing and the Variance-Optimal Martingale Measure. AA University of Bonn and Technische Universitaet Berlin. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/336; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 29. PR no charge. JE G13, D81. KW Option Pricing. Martingale Measure. Incomplete Markets. Adjustment Process. Mean-Variance Tradeoff.

AB We consider the problem of approximating a given random variable by the sum of a constant and a stochastic integral derived from a semimartingale process, with respect to a suitable norm. This problem comes from financial mathematics where the optimal constant can be interpreted as an approximation price for the contingent claim. An elementary computation yields the optimal constant as the expectation of the contingent claim. In the case of finite discrete time, we explicitly construct the measure underlying the contingent claim's expectation by backward measure. The continuous-time framework is also examined.

### Scudder, Gary D.

TI Time-Based Software Development. AU Blackburn, Joseph D.; Scudder, Gary D.; Van Wassenhove, Luk N.; Hill, C.

TI Improving Speed and Productivity of Software Development: A Survey of European Software Developers. AU Blackburn, Joseph D.; Scudder, Gary D.; Van Wassenhove, Luk N.

TI Improving Speed and Productivity of Software Development. AU Blackburn, Joseph D.; Scudder, Gary D.; Van Wassenhove, Luk N.

### Seabright, Paul

TI Trade Liberalisation and the Co-Ordination of Competition Policy. AU Neven, Damien; Seabright, Paul.

TI European Industrial Policy: the Airbus Case. AU Neven, Damien; Seabright, Paul.

### Sekkat, Khalid

TI The Impact of Exchange Rate Fluctuations on European Union Trade. AU Sapir, Andre; Sekkat, Khalid; Weber, Axel A.

### Shabsigh, Ghiath

PD October 1995. TI The Underground Economy: Estimation, and Economic and Policy Implications -- The Case of Pakistan. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/101; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 18. PR not available. JE E62, O17, O53. KW Underground Economy. National Product. Pakistan.

AB This paper estimates the size of the underground economy in Pakistan and analyzes its impact on Government fiscal position and the allocation of economic resources in the national economy. The results suggest that there is a mutual dependency between the size of the underground economy and fiscal deficits, and show a leakage from the national income-expenditure cycle in the formal economy to the underground economy via private investments. Finally, the paper proposes long-and short-run policies to reduce the size of the underground economy.

### Sheldon, Marie

PD November 1995. TI Estimation and Inference in Cointegrated Systems Under Near-Integration. AA University of Birmingham. SR University of Birmingham, Department of Economics, Discussion Paper: 95/29; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. PG 31. PR 2 pounds. JE C12, C13, C15, C22. KW Cointegration. Near-Integration. Robustness. Unit Root.

AB This paper investigates the finite sample robustness of modified OLS regression method to a deviation from the unit root hypothesis. It is found that robustness depends on the contemporaneous covariance between the disturbances of the cointegrating regression and the shocks driving the regressors and on the extent of the deviation from unity. When the covariance is small, all methods are fairly robust but Phillips and Hansen's and Park's approaches display the best performance in terms of estimation and inference. Then the covariance is large and negative, none of the proposed methods is robust to a deviation from unity.

**TI** Agreement and Disagreement Between Unit Root Tests.  
**AU** Ayat, K.L.; Boero, G.; Burridge, Peter; Sheldon, Marie.

### Shiells, Clinton

**TI** The Uruguay Round and Net Food Importers.  
**AU** Eiteljorge, Uwe; Shiells, Clinton.

### Sicsic, Pierre

**PD** September 1994. **TI** French Post-War Growth: From (Indicative) Planning to (Administered) Market. **AU** Sicsic, Pierre; Wyplosz, Charles. **AA** Sicsic: Banque de France. Wyplosz: INSEAD. **SR** Centre for Economic Policy Research, Discussion Paper: 1023; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 31. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** E61, G28, N14, N24, P17. **KW** France. Growth. Planning. Human Capital. Post-War Reconstruction.

**AB** France's post-war growth has gone through four phases. The strong growth performance of the 1950s was helped by a phenomenon of catch-up on best foreign practices, and by a positive effect of capital rejuvenation. Yet the best performance was to follow and covered a period beginning around 1958 and coming to an abrupt end in 1973. The macroeconomic treatment of the oil shock was less than happy, and the supply-side measures came to a standstill. The 1980s proved no better, even though further liberalization measures were taken, this time in the financial markets as well the privatization of a significant part of state-owned industry. Despite several waves of liberalization, significantly after the creation of the EEC and the return of the franc to convertibility, both in 1958, and then in the 1980s, France still appears to be struggling and suffering from lingering powerful rigidities. Labor market institutions and human capital accumulation may have replaced protection and inefficient productive capital accumulation as the main source of slower growth.

### Siebert, W.S

**TI** Mandated Benefits, Welfare, and Heterogeneous Firms.  
**AU** Addison, John T.; Barrett, C.R.; Siebert, W.S.

### Sinclair, Peter J.N

**TI** Growth and Development: What Scope For a European Initiative? Labour Subsidies: Old Wine in New Bottles?  
**AU** Artis, M. J.; Sinclair, Peter J.N.

**PD** May 1995. **TI** Ability Taxes Might Be Feasible.  
**AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 95/16; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. **PG** 27. **PR** 2 pounds. **JE** H20. **KW** Ability Tax.

**AB** Lump sum taxes levied on ability can satisfy efficiency and justice conditions, in contexts where earnings ability is unequally distributed. But the general view is that they are typically infeasible if ability is private information: it pays the abler to lie. This paper shows that ability taxes may be feasible in a repeated game when ability is stochastic, lying is sometimes detectable and punished, and agents' utilities are sufficiently concave.

**PD** August 1995. **TI** On Optimal Exchange Rate Trends.  
**AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper:

95/28; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. **PG** 41. **PR** 2 pounds. **JE** E31, F31, H21, J64. **KW** Optimum Inflation. Unemployment. Exchange Rates. Monetary Union.

**AB** Should countries seek to tax money (if at all) at a common or at different rates? When individuals' abilities to earn are unevenly distributed or random, how are income tax rates related to inflation and unemployment, and when and why may countries opt for different rates of inflation? When will multi-country monetary union by preferable to independent monetary policies set at national levels? This paper examines these questions in a steady-state, market-clearing setting where first-best taxes are precluded. When national differences in optimum inflation, due to differences in social welfare functions, transactions technologies, ability dispersions or government spending requirements, are large enough to outweigh currency conversion costs, a monetary union should be rejected in favor of trended nominal exchange rates.

**PD** October 1995. **TI** Bigger Trade Blocs Need Not Entail More Protection.  
**AU** Sinclair, Peter J.N.; Vines, David. **AA** Sinclair: University of Birmingham; Vines: Balliol College and Institute of Economics and Statistics, Oxford; Australian National University; and Centre for Economic Policy Research, London. **SR** University of Birmingham, Department of Economics, Discussion Paper: 95/32; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. **PG** 24. **PR** 2 pounds. **JE** F13, F15. **KW** Protection. Trade Blocs.

**AB** The standard model of trade blocs setting Nash optimum tariffs predicts (a) that bigger blocs set higher tariffs, and (b) that welfare declines as the number of trade blocs shrinks (to 3). It relies on two assumptions: (i) that supplies of any good are restricted to only one country, and (ii) that trade blocs set common external tariffs. We find that relaxing (i) enough reverses prediction (a), and that, if trade blocs act as free trade areas, both (a) and (b) fail to hold. In the latter case, trade blocs expansion is unambiguously welfare-improving.

**PD** November 1995. **TI** Monopolies, Localized Ownership and Pauperizing Trade.  
**AA** University of Birmingham. **SR** University of Birmingham, Department of Economics, Discussion Paper: 95/31; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. **PG** 21. **PR** 2 pounds. **JE** F12, D42, D43, F13. **KW** International Trade. Localized Ownership. Monopoly.

**AB** This paper examines a world with decreasing-cost monopolies that set prices to maximize their owner's utilities. In autarky each country produces each of these products, but, under free trade, only one. All countries may suffer losses from trade when price discrimination is banned, and must lose if export prices are allowed to differ from domestic prices. These results depend upon localized ownership and the absence of average-cost pricing restrictions.

### Sinclair-Desgagne, B.

**TI** Environmental Audits and Incentive Compensation.  
**AU** Gabel, H.L.; Sinclair-Desgagne, B.

### Singh, Ajit

**PD** December 1994. **TI** The Stockmarket, the Financing

of Corporate Growth and Indian Industrial Development. AA University of Cambridge. SR University of Cambridge, Discussion Papers in Accounting and Finance: AF10; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 43. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE G32, O53, O16. KW India. Stock Market. Corporate Growth. Industrial Development.

AB The fast expansion of the Indian stock market in the recent period is part of a world-wide phenomenon. The Indian market today is the second largest in the world in terms of the number of listed companies, only slightly behind that of the U.S. This paper explores some aspects of the relationship between the stock market and Indian industrial development. Inter alia, the paper investigates in a comparative international context the role of equity markets in financing the growth of the largest Indian manufacturing corporations. The last section outlines the policy implications of the analysis.

PD March 1995. TI The Anglo-Saxon market for Corporate Control, the Financial System and International Competitiveness. AA University of Cambridge. SR University of Cambridge, Discussion Papers in Accounting and Finance: AF16; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 21. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE G32, F23. KW Corporate Control. Competitiveness.

AB The last decade has witnessed a growing debate on both sides of the Atlantic on the effectiveness of the stock market based financial systems of the US and the UK for promoting international competitiveness and industrial strength. The main object of this paper is to examine specifically the role of the market for corporate control in the Anglo-Saxon financial system and to investigate its relationship to the question of international competitiveness. The causal links between the two-the market for corporate control and "international competitiveness"-are far from obvious even at a conceptual level, and some are quite controversial. The last part of the paper comments on Michael Porter's recent proposal for the reform of the Anglo-Saxon financial system and outlines an alternative.

PD December 1995. TI Pension Reform, the Stock Market, Capital Formation and Economic Growth: a Critical Commentary on the World Bank's Proposal. AA University of Cambridge. SR University of Cambridge, Discussion Papers in Accounting and Finance: AF22; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 33. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE E21, H55, G18. KW Pension Reform. World Bank.

AB Proposing far-reaching reforms to the pension systems, the World Bank recently suggested the existing pay-as-you-go pension systems in many rich as well as poor countries should be replaced by fully funded, mandatory, preferably private pensions, as the main pillars of the new system. It argues that these reforms will not only benefit the pensioners, but also enhance savings, promote capital formation and economic development. This paper provides a critical examination of the Bank's theses and concludes that it has adopted a one-sided view of the relationships between the key critical variables. The

proposed reform may therefore neither protect the old nor achieve faster economic growth.

**Singh, N.**

TI "Homogeneity of Variance Test" for the Comparison of Two or More Spectra. AU Maharaj, E. A.; Singh, N.; Inder, Brett A.

**Siotis, George**

TI Technology Sourcing and FDI in the EC: an Empirical Evaluation. AU Neven, Damien; Siotis, George.

**Skott, Peter**

TI Dynamic Effects of Trade Liberalization and Currency Overvaluation Under Conditions of Increasing Returns. AU Ros, Jaime; Skott, Peter.

PD August 1995. TI Economic Divergence and Institutional Change: Some Observations on the Convergence Literature. AA University of Aarhus. SR University of Aarhus, Department of Economics, Memo: 1995/9; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK/8000 Aarhus C, DENMARK. PG 24. PR no charge. JE O11, O47, F40. KW Beta Convergence. Institutional Change. Political Instability. St. Petersburg Paradox.

AB The new growth literature analyzes economies in which the growth rate is determined endogenously and per capita incomes may diverge across countries. Divergence, however, leads to changes in the domestic policies and institutions of slow-growing nations, political instability, and changes in international relations. Induced institutional change of this kind affects the interpretation of the empirical evidence: a divergent process may be stabilized by institutional and political intervention. Using simple models it is shown that stabilization may result even if the effects of each intervention is stochastic and the expected value of the benefits from each reform is non-positive. Thus, the appearance of conditional convergence in studies by Barro and others may carry no implications for "the underlying parameters of technology and preferences".

PD August 1995. TI The Stagflationary Consequences of "Prudent" Monetary Policy in a Unionized Economy. AA University of Aarhus. SR University of Aarhus, Department of Economics, Memo: 1995/10; Department of Economics, University of Aarhus, Building 350, Universitetsparken, DK/8000 Aarhus C, DENMARK. PG 17. PR no charge. JE E52, E61. KW Precommitment. Discretionary Policy. Time Inconsistency. Stagflation. Policy Game.

AB Stylized models of the policy game between monetary policy makers and the private sector have suggested that discretionary policy regimes suffer from an inherent inflationary bias and that precommitment to a target rate of inflation may be desirable. This paper shows that in the presence of labor unions, the basic structure of the monetary policy game can lead to radically different results: governments that are completely indifferent to the level of inflation may obtain outcomes with high employment rates and zero inflation while "prudent", inflation-averse governments generate stagflation with positive inflation and low rates of employment.

**Slade, Margaret E.**

TI A Simple Test for Spatial Correlation in Probit Models.



AU Pinkse, Joris; Slade, Margaret E.

TI Retail Contracting and Costly Monitoring: Theory and Evidence. AU Lafontaine, Francine; Slade, Margaret E.

TI Retail Contracting: Theory and Practice. AU Lafontaine, Francine; Slade, Margaret E.

PD November 1995. TI Beer and the Tie: Did Divestiture Lead to Higher Prices? AA University of British Columbia and GREQAM. SR University of British Columbia, Department of Economics Discussion Paper: 95/44; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 40. PR 20 cents per page Canadian to other than educational institutions. JE C73, D43, L14, L42, L66. KW Beer. Contract Choice. Game-Playing Agents. Regime Shifts. Panel Data.

AB In 1989, the UK government enacted measures that led brewers to divest themselves of 14,000 public houses. Since that time, retail prices have risen. This paper contains an econometric analysis of the transition period. The analysis is based on a theoretical model of the relationship between retail price and retail-organizational form that emphasizes the strategic aspects of this relationship.

PD January 1996. TI Optimal Pricing With Costly Adjustment: Evidence From Retail-Grocery Prices. AA University of British Columbia and GREQAM. SR University of British Columbia, Department of Economics Discussion Paper: 96/02; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 35. PR 20 cents per page Canadian to other than educational institutions. JE L13, L81, D43. KW Menu Costs. (s,S) Models. Dynamic-Discrete Choice. Panel Data. Retail Sales.

AB In many theoretical models, it is assumed that there are costs associated with adjusting prices. In this paper, the existence, type, and magnitude of such costs are investigated empirically. A discrete-time discrete-choice dynamic-programming model that nests fixed and variable costs is developed, and econometric estimates of the adjustment-cost function are obtained. The data used to implement the model consist of weekly retail-transactions prices and sales of three brands of saltine crackers sold by four chains of grocery stores in a small U.S. town. The study has several distinguishing characteristics. First, the data are highly disaggregate (at the level of brand and store). Second, variables are sampled at weekly intervals. Third, the model nests fixed and variable-adjustment costs and can therefore determine their relative importance. Finally, the discrete-choice model is both structural and dynamic.

### Sloth, Birgitte

TI Adaptive Learning in Extensive Form Games and Sequential Equilibrium. AU Hendon, Ebbe; Jacobsen, Hans Jorgen; Sloth, Birgitte.

TI NASH Equilibrium in Lower Probabilities. AU Hendon, Ebbe; Jacobsen, Hans Jorgen; Sloth, Birgitte; Tranaes, Torben.

TI NASH Equilibrium in Lower Probabilities. AU Hendon, Ebbe; Jacobsen, Hans Jorgen; Sloth, Birgitte; Tranaes, Torben.

### Smith, Eric

PD May 1994. TI Cross-Section Estimation of the Matching Function: Evidence from England and Wales. AU Smith, Eric; Coles, Melvyn G. AA University of Essex. SR Centre for Economic Policy Research, Discussion Paper: 966; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 13. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE J64, C21, J23. KW Matching. Returns to Scale. Cross-Section Estimation.

AB This paper analyzes how the levels of unemployment and vacancies affect the rate at which unemployed workers find employment -- the worker-firm "matching function". In particular we test the robustness of previous empirical work by checking whether we obtain the same estimated function using cross-section data rather than aggregate time series data. We find strong evidence of constant returns to scale similar to previous work. We also find larger cities have higher wages. This provides indirect support for increasing returns, but where those returns are taken in the form of better-quality matches.

TI Marketplaces and Matching. AU Coles, Melvyn G.; Smith, Eric.

TI Strategic Bargaining With Firm Inventories. AU Coles, Melvyn G.; Smith, Eric.

TI The Low Skill Trap. AU Burdett, Kenneth; Smith, Eric.

### Smith, Jeffrey

TI Accounting for Dropouts in Evaluations of Social Experiments. AU Heckman, James; Smith, Jeffrey; Taber, Christopher.

### Smith, R.C.

PD 1995. TI Rethinking Emerging Markets. AU Smith, R.C.; Walter, I. AA Smith: New York University. Walter: INSEAD. SR INSEAD, Working Papers: 95/64/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 25. PR not available. JE G14, G15, F21, F34, O16. KW Mexican Financial Crisis. Emerging Markets. Market Illiquidity. Incomplete Market.

AB This paper examines the impact of the Mexican financial crisis of late 1994 and early 1995 on global investors as well as on authorities in host countries. The impact of the crisis on global emerging market stock returns, inter-market correlations and efficient portfolios are considered in terms of the dynamics of the crisis-impact under conditions of market illiquidity and the absence of emerging market equity derivatives. Similarly, suggestions are provided to emerging market governments as to how cross-border portfolio equity flows should appropriately fit into the development of local capital markets in the light of lessons learned from the crisis.

### Snape, Richard H.

TI European and American Regionalism: Effects on and Options for Asia. AU Anderson, Kym; Snape, Richard H.

### Snower, Dennis J.

PD July 1994. TI Unemployment Persistence and the Unemployment-Productivity Relation. AA University of London. SR Centre for Economic Policy Research,

Discussion Paper: 958; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 8. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE E31, E32, J23, J31, J64. KW Unemployment. Productivity. Unemployment Persistence. Inflation.

AB This paper explores the interrelation between the degree of unemployment persistence and the unemployment-productivity trade-off. The analysis suggests that the more effective are structural labor market policies (designed to change labor market institutions and laws, such as job security legislation) in making wages and prices more responsive to current unemployment and making unemployment less persistent, the less effective will be the growth-promoting supply-side policies (such as training schemes) in reducing unemployment.

TI Price Inertia and Production Lags. AU Lindbeck, Assar; Snower, Dennis J.

TI Patterns of Unemployment: An Insider-Outsider Analysis. AU Lindbeck, Assar; Snower, Dennis J.

PD September 1994. TI The Low-Skill, Bad-Job Trap. AA Birkbeck College. SR Centre for Economic Policy Research, Discussion Paper: 999; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 18. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE D21, D62, D82, D83, E24. KW Skills. Productivity. Training. Vacancies. Employment.

AB The paper explains how a country can fall into a "low-skill, bad-job trap", in which workers acquire insufficient training and firms provide insufficient skilled vacancies. In particular, the paper argues that in countries where a large proportion of the workforce is unskilled, firms have little incentive to provide good jobs (requiring high skills and providing high wages), and if few good jobs are available, workers have little incentive to acquire skills. In this context, the paper examines the need for and effectiveness of training policy, and provides a possible explanation for why Western countries have responded so differently to the broad-based shift in labor demand from unskilled to skilled labor.

PD November 1994. TI What is the Domain of the Welfare State? AA Birkbeck College. SR Centre for Economic Policy Research, Discussion Paper: 1018; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 32. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE H11, H53, I28, I18, I31. KW Welfare State. Free Enterprise. Unemployment. Education. Health. Poverty. Inequality.

AB The paper examines the appropriate domain of the Welfare State by exploring the areas in which free enterprise fails to provide adequate welfare state services. The paper outlines a simple coherent strategy for formulating government welfare state policy by identifying the relevant market failures, government failures, and implementation costs. Two proposals for reform of the Welfare State are outlined.

### Snyder, R.D

TI Estimation and Prediction for a Class of Dynamic Nonlinear Statistical Models. AU Ord, J.K.; Koehler, A.; Snyder, R.D.

PD April 1995. TI Inventory Control: Back to the Molehills. AA Monash University. SR Monash University, Department of Econometrics Working Paper: 5/95; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. PG 16. PR no charge. JE C44. KW Inventory Control. Business Commuting. Spreadsheets. Seasonal Inventories.

AB It is argued in this paper that conventional inventory control theory, in the form that it is implemented and widely used today, is largely the product of an era when most businesses operated with primitive mechanical calculators rather than computers. The methods devised at the time reflect that fact that calculations had to be undertaken by hand and therefore could be neither complicated nor burdensome. There was, as a consequence, an extensive reliance on analytical methods. This enabled the development and use of tables and monographs to simplify and streamline the associated calculations. In recent years we have witnessed changes of revolutionary proportions with the development and widespread penetration of cheap, powerful computational technologies into most aspects of business activity. The proposition put forward and elaborated in this paper is that it is timely to review current practices in inventory control, and determine whether the new technologies provide opportunities for approaches possessing a greater reliance on numerical methods in place of those with an analytical orientation. As a consequence, new possibilities for periodic review order-up-to and reorder level inventory systems are explored together with adaptations which allow for growth and seasonal effects in demand. A common feature of the proposed approaches is that they largely bypass the statistical forecasting methods commonly used in conjunction with computerized inventory control systems. Furthermore, they provide a mechanism for coping with problems of uncertainty without recourse to formal probability theory. It is argued that, as a consequence, they are better suited for use in most business settings where those delegated to control inventories usually lack the formal mathematical skills and knowledge to fully understand and to make effective use of the classical methods.

### Sola, Martin

TI A Reconsideration of the Empirical Evidence on the Asymmetric Effects of Money Supply Shocks: Positive versus Negative or Big versus Small? AU Ravn, Morten O.; Sola, Martin.

### Solar, Peter M.

TI Economic Growth in Post-War Belgium. AU Cassiers, Isabelle; De Ville, Philippe; Solar, Peter M.

### Solomon, Marius M.

TI Solving the Discrete Lotsizing and Scheduling Problem With Sequence Dependent Set-Up Costs and Set-Up Times Using the Travelling Salesman Problem With Time Windows. AU Salomon, Marc; Solomon, Marius M.; Van Wassenhove, Luk N.; Dumas, Yvan; Dauzere-Peres, Stephane.

### Sommer, Daniel

TI A Systematic Approach to Pricing and Hedging of International Derivations with Interest Rate Risk. AU Frey, Ruediger; Sommer, Daniel.

**Sorensen, Bent E.**

TI Worker Flows and Job Flows in Danish Manufacturing, 1980-91. AU Albaek, Karsten; Sorensen, Bent E.

TI GMM Estimation of a Stochastic Volatility Model: A Monte Carlo Study. AU Andersen, Torben G.; Sorensen, Bent E.

**Sorensen, Jan Rose**

TI Schooling, Training, Growth and Minimum Wages. AU Ravn, Morten O.; Sorensen, Jan Rose.

**Southey, George**

TI The Borrower's Curse: Optimism, Finance and Entrepreneurship. AU Demeza, David E.; Southey, George.

**Spokoiny, Vladimir G.**

TI Minimax Nonparametric Hypothesis Testing: The Case of an Inhomogeneous Alternative. AU Lepski, O.V.; Spokoiny, Vladimir G.

PD September 1995. TI Adaptive Hypothesis Testing Using Wavelets. AA Weierstrass Institute for Applied Analysis and Stochastics and Institute for Information Transmission Problems. SR Weierstrass Institut für Angewandte Analysis und Stochastik Preprint: 176; Weierstrass Institut für Angewandte Analysis und Stochastik, Mohrenstrabe 39, D/10117 Berlin, GERMANY. PG 29. PR not available. JE C12, C14, C20. KW Signal Detection. Minimax Hypothesis Testing. Nonparametric Alternative. Error Probabilities. Wavelet Decomposition. Thresholding. Adaptive Test.

AB The present paper continues studying the problem of minimax nonparametric hypothesis testing started in Lepski and Spokoiny (1995). The null hypothesis assumes that the function observed with a noise is identically zero (i.e., no signal is present). The alternative is composite and minimax: the function is assumed to be separated away from zero in an integral norm and also to possess some smoothness properties. The minimax rate of testing for this problem was evaluated by Ingster for the case of Sobolev smoothness classes. Then this problem was studied by Lepski and Spokoiny in the situation of an alternative with inhomogeneous smoothness properties that leads to considering Besov smoothness classes. But for both cases the optimal rate and the structure of optimal (in rate) tests depends on smoothness parameters which are usually unknown in practical applications. In this paper the problem of adaptive (assumption free) testing is considered. It is shown that the adaptation without loss of efficiency is impossible. An extra factor is nonsignificant but unavoidable payment for the adaptation. A simple adaptive test based on wavelet technique is constructed which is nearly minimax for a wide range of Besov classes.

**Spolaore, Enrico**

TI On the Number and Size of Nations. AU Alesina, Alberto; Spolaore, Enrico.

**Staehr, Karsten**

PD July 1995. TI Indexation, Contract Length, and the Cost of Disinflation in Economies With Extreme Inflation. AA University of Copenhagen. SR University of Copenhagen, Institute of Economics, Discussion Paper: 95/13; Institute of Economics, University of Copenhagen,

Studiestraede 6, 1455 Copenhagen K, DENMARK. PG 22. PR not available. JE E31, J31. KW Indexed Wages. Inflation. Disinflation Costs. Contract Length.

AB This paper examines the real cost of disinflation in an economy with high and uncertain inflation. The private sector writes contracts in which wages are indexed to a lagged price index and the exchange rate ("dollarization"). Contracts of fixed and endogenously determined lengths are considered. The real costs of disinflation depend on the initial conditions and on the credibility of the stabilization. The higher and more uncertain the initial inflation is, the lower the sacrifice ratio is.

**Staiger, Robert W.**

TI Multilateral Tariff Cooperation During the Formation of Customs Unions. AU Bagwell, Kyle; Staiger, Robert W.

TI Collusion Over the Business Cycle. AU Bagwell, Kyle; Staiger, Robert W.

**Steagall, Jeffrey W.**

TI An Analysis of US International Trade Commission Decisions in Antidumping, Countervailing Duty and Safeguard Cases. AU Baldwin, Robert E.; Steagall, Jeffrey W.

**Stevens, Glenn**

TI Monetary Policy Goals for Inflation in Australia. AU Debelle, Guy; Stevens, Glenn.

**Stoker, Thomas**

TI Consumption and the Timing of Income Risk. AU Blundell, Richard; Stoker, Thomas.

**Stopford, John M.**

TI The Nature of the Large Corporation. AU Rumelt, Richard P.; Stopford, John M.

**Sutton, R.I**

PD September 1995. TI Consequences of Public Scrutiny for Leaders and Their Organizations. AU Sutton, R.I.; Galunic, D.C. AA Sutton: Stanford University. Galunic: INSEAD. SR INSEAD, Working Papers: 95/79/OB; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 61. PR not available. JE M14, L21. KW Public Scrutiny. Inefficiency. Leaders.

AB Much research emphasizes that leaders and organizations that are noticed by and please others will be rewarded with power, legitimacy, and resources. This literature implies that leaders, and others in symbolic roles, must work under close scrutiny if they wish to garner such rewards for themselves and their organizations. Yet little theory or research considers the consequences of such scrutiny. This essay lays groundwork for research on public scrutiny by defining it, specifying its consequences, and identifying defenses that may reduce its negative consequences. The content of public scrutiny may be positive or negative. This intense and intrusive form of attention is characterized by a blend of persistent attention to the leader or organization, close and persistent performance monitoring and evaluation, frequent interruptions, and relentless questions about past, current, and future actions. If unchecked, these distractions are proposed to cause cognitive overload, with attention focused on how the leader or organization appears to others and explaining such appearances. Overload is also proposed to generate negative

effects (especially evaluation apprehension), which is accentuated during interruptions. Consequences for leaders and their organizations include: (1) delays in ongoing tasks; (2) attention and effort devoted toward symbolic activities, away from other kinds of activities; (3) greater adherence to injunctive norms, less adherence to descriptive norms; (4) attention and effort focused on well-rehearsed acts, away from acts that require learning or creativity; and (5) greater perseverance at ongoing and planned activities. We identify interpersonal, procedural, and structural defenses that leaders and organizations use to reduce scrutiny and its negative consequences. We then consider the limitations and drawbacks of such defenses. Finally, we suggest directions that future work on scrutiny might take.

#### Swierzbinski, Joe

TI Hard Bargains and Lost Opportunities. AU Binmore, Ken; Proulx, Chris; Samuelson, Larry; Swierzbinski, Joe.

#### Szulanski, G.

PD November 1994. TI Unpacking Stickiness: An Empirical Investigation of the Barriers to Transfer Best Practice Inside the Firm. AA University of Pennsylvania. SR INSEAD, Working Papers: 95/37/SM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 35. PR not available. JE D24, L23, M11, M12. KW Knowledge Transfer. Innovation. Technology Transfer. Management.

AB Stickiness of knowledge, i.e. the difficulty to transfer knowledge, is emerging as a central construct for both scholars and practitioners interested in innovation. Yet, so far, little attention has been paid to the many possible determinants of stickiness. This paper reports the findings of a systematic empirical investigation into the origins of stickiness in a setting that, of late, is stridently reclaiming managerial attention: the barriers to transfer best practice inside the firm. This phenomena provides a balanced empirical setting to study stickiness. The research framework integrates into a communication approach to technology transfer, important conceptual developments from related fields such as innovation diffusion, sociology and organizational learning. Extensive fieldwork helped fine-tune the operationalization of the framework to the phenomena under study. The predictions derived from the framework are formalized in nine propositions. The propositions are then tested empirically through a two step large sample survey. Special attention has been paid in this study to the operationalization of variables and to the design and execution of the survey. The framework receives adequate support from the data. The findings, some of them surprising, are discussed with the benefit of insights gained from supplemental qualitative and quantitative evidence and analysis. The paper ends by outlining the theoretical and practical implications of the findings for the study of knowledge transfer.

PD 1995. TI Strategy Formulation as Disciplined Imagination. AU Szulanski, G.; Doz, Y. AA Szulanski: University of Pennsylvania. Doz: INSEAD. SR INSEAD, Working Papers: 95/56/SM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 23. PR not available. JE L10. KW Strategy Formation. Adaptation.

AB In this paper we deduce the characteristics of a high quality strategy making process, one that increases the likelihood of successful adaptation. We do so by exploiting the

simile between an iterative, problem solving oriented view of the strategy process and an evolutionary perspective of theory building.

#### Taber, Christopher

TI Accounting for Dropouts in Evaluations of Social Experiments. AU Heckman, James; Smith, Jeffrey; Taber, Christopher.

#### Talmain, Gabriel

PD October 1995. TI Exact and Approximate Solutions to the Problem of Precautionary Savings. AA University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 95/35; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 32. PR 20 cents per page Canadian to other than educational institutions. JE C61, D81, D91, E21. KW Certain Equivalence. Precautionary Savings. Risk Aversion. Stochastic Dynamic Programming.

AB A finitely-lived agent, whose labor income and returns on asset holdings are subject to random shocks, maximizes an additively separable expected utility function. The shocks are not necessarily independent. This paper extends Deaton's characterization of optimal consumption as a sequence of policy functions to the general case. Under the assumption that shocks are small relative to the mean, a first-order approximation is obtained which yields a very tractable agent's behavior. This approximation is expressed as a deviation from the certain equivalent, and is a linear function of the variances and covariance of the innovations. It can be interpreted as the buffer stock optimal precautionary savings of Carroll and Deaton.

PD January 1996. TI Redistribution and Growth: Pareto Improvements. AU Talmain, Gabriel; Chou, Chien Fu. AA Talmain: University of British Columbia. Chou: National Taiwan University. SR University of British Columbia, Department of Economics Discussion Paper: 96/03; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 29. PR 20 cents per page Canadian to other than educational institutions. JE D31, D90, O30, O41. KW Endogenous Growth. Redistribution. Wealth Distribution. AB This paper introduces heterogeneous households who have preferences for leisure into Grossman and Helpman's model of endogenous growth. Wealth distribution affects the endogenous rate of growth as the labor supply of each individual responds inversely to his permanent income. When the labor Engel curve is concave (convex), unequal wealth distribution decreases (increases) the rate of growth. Pareto-improving- growth-enhancing wealth redistributions are characterized.

#### Tan, Guofu

TI Cost-Reducing Investment, Optimal Procurement and Implementation by Auctions. AU Piccione, Michele; Tan, Guofu.

TI Entry and Exit in Hub-Spoke Networks. AU Hendricks, Ken; Piccione, Michele; Tan, Guofu.

TI A Theory of Alliance Formation. AU Niou, Emerson M.S.; Tan, Guofu.

**PD** September 1995. **TI** A Simple Model of Expert and Non-Expert Bidding in First Price Auctions. **AU** Tan, Guofu; Piccione, Michele. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 95/28; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 21. **PR** 20 cents per page Canadian to other than educational institutions. **JE** D44, D82. **KW** First-Price Auctions. Neutral Signals. Common Values.

**AB** This paper studies the equilibrium bidding behavior in a first-price sealed-bid auction when the number of informed bidders is not common knowledge. Both the independent private values and the common value cases are analyzed, under the assumption that a "neutral" signal exists. In equilibrium, experts and non-experts draw their bids from distinct supports: experts bid in the upper and lower tail of the bidding distribution and non-experts randomize their bids in between. For common values, it is shown that the seller's expected revenue always decreases with the probability of a bidder being informed when this probability is small. The opposite result is shown for the case of independent private values.

#### Tanner, Glenn

**TI** Central Bank Intervention and the Volatility of Foreign Exchange Rates: Evidence from the Options Market. **AU** Bonser-Neal, Catherine; Tanner, Glenn.

#### Tanzi, Vito

**PD** December 1995. **TI** The Growth of Government and the Reform of the State in Industrial Countries. **AU** Tanzi, Vito; Schuknecht, Ludger. **AA** International Monetary Fund. **SR** International Monetary Fund, Working Paper: 95/130; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 34. **PR** not available. **JE** E62, H11, H55, P17. **KW** Government Size. Welfare State. Social Utility.

**AB** This paper describes the growth of public spending in industrial countries over the past century. It identifies several periods: the periods between 1870 and 1913; the period between the two World Wars; the post World War II period up to 1960; and the period after 1960. Public spending started growing during World War I but its growth accelerated after 1960. The paper outlines the reasons for this growth and speculates that recent government growth has not brought about much economic or social progress. The paper sees the future of government mainly in setting the "rules of the game," and provides a rough blueprint for reform. It also discusses experiences with government reform in selected countries, and predicts that over the next decades, public spending as a share of GDP will fall.

#### Taylor, M. Scott

**TI** Trade and the Environment: A Partial Synthesis. **AU** Copeland, Brian R.; Taylor, M. Scott.

**TI** Trade, Non-Convexities and the Environment. **AU** Copeland, Brian R.; Taylor, M. Scott.

**TI** Open Access Renewable Resources: Trade and Trade Policy in a Two-Country Model. **AU** Brander, James A.; Taylor, M. Scott.

**TI** The Simple Economics of Easter Island: A Ricardo-Malthus Model of Renewable Resource Use. **AU** Brander, James A.; Taylor, M. Scott.

#### Taylor, Mark P.

**TI** The Empirics of Economic Growth in Previously Centrally Planned Economies. **AU** Leamer, Edward E.; Taylor, Mark P.

#### Teague, Jackqueline L.

**TI** Parental Leave Policies in Europe and North America. **AU** Ruhm, Christopher J.; Teague, Jackqueline L.

#### Tenreiro, C.

**TI** A Comparison of Kernel Estimator Based Goodness of Fit Tests. **AU** Gourieroux, Christian; Tenreiro, C.

#### Terwiesch, Christian

**PD** 1995. **TI** Time and Information Problems in Overlapping Development Activities. **AA** INSEAD. **SR** INSEAD, Working Papers: 95/93/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 25. **PR** not available. **JE** L23. **KW** Overlapping Development. Organization Theory. Information Exchange.

**AB** Overlapping development activities is one of the most important tools to reduce development lead time. However, given dependencies between activities, overlapping requires complex coordination mechanisms and can therefore have negative side effects. This article describes a simple model of two development activities, illustrating the trade-offs in the decision how much to overlap. Based on some ideas from organization theory, we derive optimal levels of information exchange and concurrency as well as the technical factors driving them. The model and our main results are illustrated with a numerical example.

**TI** Communication and Uncertainty in Concurrent Engineering. **AU** Loch, Christoph H.; Terwiesch, Christian.

**PD** March 1996. **TI** The Role of Uncertainty Reduction in Concurrent Engineering: An Analytical Model and an Empirical Test. **AU** Terwiesch, Christian; Loch, Christoph H. **AA** INSEAD. **SR** INSEAD, Working Papers: 96/17/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 41. **PR** not available. **JE** L23, L63, O32. **KW** Concurrent Engineering. Overlapping Development. Organization Theory. Uncertainty.

**AB** Concurrent engineering, or overlapping development activities, is a widely discussed tool to reduce development lead-time. However, overlapping may not be beneficial if the overlapped activities are uncertain and not independent. This article combines recent results from the organization theory and concurrent engineering literature to develop a model of two overlapping development activities. Uncertainty is incorporated via the average rate of engineering changes that occur in the upstream activity, creating rework for downstream. Dependence is modeled by the delaying impact these modifications impose on the downstream activity. The model predicts that the effectiveness of overlapping activities in reducing overall development time is moderated by the organization's capability to reduce uncertainty early upstream. Further, fast uncertainty reduction makes it optimal to use more overlap. These effects of uncertainty reduction are tested on data drawn from 140 completed development projects across several global electronics industries.

**TeSelle, Garratt H.**

PD September 1995. TI Stock Price Volatility Tests of Narrow and Broad Dividends: a Closer Examination of the Results of Ackert and Smith. AA University of Minnesota. SR University of Minnesota, Center for Economic Research. Discussion Paper: 282; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. PG 22. PR no charge. JE G12, G14, G22. KW Volatility Test. Stock Price. Variance Bounds. Broad Dividends.

AB Ackert and Smith (1993) suggest that volatility tests of stock prices should be based on a more inclusive definition of dividends than has actually been used in past studies. They perform a West test using such a dividend definition, and conclude that stock prices are not excessively volatile relative to these dividends. This paper considers their work on two bases: First, it argues that in most cases the expanded dividend definition would not be expected to lead to volatility conclusions that differ from those reached under the narrower definition; second, it presents evidence that Ackert and Smith's empirical results may have been induced by unrecognized test bias created by non-stationarities in their data.

**Thimann, Christian**

PD November 1995. TI Effective Taxation for Recipients of Social Assistance in Germany and the Consequences of the 1996 Tax Reform. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/120; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 22. PR not available. JE H53, H24, J22. KW Welfare Programs. Marginal Rate. Social Security. Germany.

AB This paper explores the problem of effective taxation at the lower end of the income scale in Germany. For the recipients of social income maintenance--currently about 1.8 million nationals--effective taxation consists not only of the explicit taxation through the tax code but also of the implicit taxation through the withdrawal of benefits. The paper calculates effective tax rates for recipients of social assistance; it is shown that for labor incomes in the lower income range explicit and implicit taxation add up to a marginal burden of just under 75 percent on average. The 1996 tax reform alleviates the explicit tax burden on low incomes, but it does not alleviate the total marginal burden on labor earnings of welfare recipients. It increases net incomes, but since the withdrawal of benefits increases with net incomes, too, the overall burden remains practically unchanged. Therefore, effective welfare traps remain prevalent; these could only be avoided through a reform of the system of social assistance and withdrawal. Constraints and possible steps for reform are discussed.

**Thisse, Jacques-Francois**

TI Product Variety and Welfare Under Discriminatory and Mill Pricing Policies. AU Norman, George; Thisse, Jacques-Francois.

TI Firm Location and Job Creation in Cities. AU Fujita, Masahisa; Thisse, Jacques-Francois; Zenou, Yves.

**Thomas, Alun**

TI Relative Prices and Economic Adjustment in the US and EU: A Real Story About European Monetary Union.

AU Bayoumi, Tamim A.; Thomas, Alun.

**Thomas, Jonathan**

PD October 1995. TI The Role of Selective Job Search in UK Unemployment. AA University College London. SR University College London Discussion Paper: 95/16; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG 25. PR 3 Pounds; checks payable to Department of Economics, University College London. JE J64, C41. KW Job Search. Unemployment Durations. Selective Search.

AB Selective search behavior where displaced workers search for a job similar to that lost has attracted considerable theoretical attention as a possible source of high unemployment because it may involve unemployment trading. However its practitioners may choose this strategy because, compared to searching randomly for "any job", it is more effective in generating acceptable job offers thus leading to shorter spells. This paper uses a sample of displaced UK males to directly investigate the connection between selective search, industry mobility and unemployment. Our main findings, from an econometric model which allows for the endogeneity of strategy choice and outcomes through unobservables, are that selective search is associated with shorter spells and plays a minor role in accounting for UK unemployment. We also find evidence against the idea that it involves unemployment trading.

**Tollenfsen, Truls Cook**

TI The Uruguay Round and Trade in Manufactures and Services. General Equilibrium Simulations of Production, Trade and Welfare Effects of Liberalization. AU Haaland, Jan I.; Tollenfsen, Truls Cook.

**Trainor, Amy B.**

TI The Effect of Medicaid Abortion Funding Restrictions on Abortions, Pregnancies, and Births. AU Levine, Phillip B.; Trainor, Amy B.; Zimmerman, David J.

**Trajtenberg, Manuel**

TI Universities As a Source of Commercial Technology: A Detailed Analysis of University Patenting 1965-1988. AU Henderson, Rebecca; Jaffe, Adam B.; Trajtenberg, Manuel.

**Tranaes, Torben**

TI Decentralized Trade in a Small Market: The Possibility of Resale. AU Hendon, Ebbe; Tranaes, Torben.

**Treigiene, Dalia**

TI Trade Policies and Lithuania's Reintegration into the Global Economy. AU Cicinskas, Jonas; Cornelius, Peter K.; Treigiene, Dalia.

**Triesch, Eberhard**

TI Using the Generalized Assignment Problem in Scheduling the ROSAT Space Telescope. AU Nowakovski, Joerg; Schwaerzler, Werner; Triesch, Eberhard.

**Tsiddon, Daniel**

TI Human Capital Distribution, Technological Progress, and Economic Growth. AU Galor, Oded; Tsiddon, Daniel.

**Tsui, Kai-Yuen**

PD July 1995. TI Social Welfare Orderings for Ratio-Scale Measurable Utilities. AU Tsui, Kai-Yuen; Weymark, John A. AA Tsui: University of Hong Kong, Weymark: University of British Columbia. SR University of British Columbia, Department of Economics Discussion Paper: 95/21; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 24. PR 20 cents per page Canadian to other than educational institutions. JE D71, D61. KW Social Welfare. Interpersonal Utility. Ratio-Scale Measurability. Translation Equation.

AB This article characterizes all of the continuous social welfare orderings which satisfy the Weak (Strong) Pareto principle when utilities are ratio-scale measurable. With Weak Pareto, on both the nonnegative and positive orthants the social welfare ordering must be representable by a weakly increasing Cobb-Douglas social welfare function while on the whole Euclidean space the social welfare ordering must be strongly dictatorial. With Strong Pareto, on the positive orthant the social welfare ordering must be representable by a strictly increasing Cobb-Douglas social welfare function but on the other two domains an impossibility theorem is obtained. Functional equations arguments are used to establish the possibility theorems.

**Turtelboom, Bart**

PD November 1995. TI Consumption Smoothing and Exchange Rate Volatility. AA International Monetary Fund.. SR International Monetary Fund, Working Paper: 95/108; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 28. PR not available. JE F31, F41, F47. KW Exchange Rate. Volatility.

AB This paper analyzes exchange rate behavior in a model where consumers trade goods to diversify shocks to their income. A model with traded and nontraded goods is simulated in a multilateral context based upon historical output correlations for the period 1970-92. Simulation results indicate that the observed volatility of multilateral real exchange rates for the United States, Germany and Japan is not inconsistent with exchange rate volatility implied by consumption-smoothing behavior.

TI Real Interest Rates, Real Exchange Rates, and Net Foreign Assets in the Adjustment Process. AU Helbling, Thomas; Turtelboom, Bart.

**Tzavalis, Elias**

PD November 1994. TI The Persistence in Volatility of the U.S. Term Premium 1970-1986. AU Tzavalis, Elias; Wickens, M.R. AA Tzavalis: University of Exeter. Wickens: University of York. SR University of Exeter, Department of Economics Discussion Paper: 94/09; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 15. PR no charge. JE C52, G12, C32, E43. KW Term Structure. Conditional Heteroskedasticity. Volatility. GARCH.

AB This paper examines the persistence of the volatility of the risk premia for excess holding period returns of the term structure using a GARCH-M model of the conditional variance. The finding of a high degree of persistence cannot be sustained once allowance is made for a structural break in the unconditional variance caused by a change in the operation of U.S. monetary policy during 1979-1982.

TI Regression Based Tests for Persistence in Conditional Variances. AU Psaradakis, Zacharias; Tzavalis, Elias.

TI Inference for Unit Roots in Dynamic Panels. AU Harris, Richard; Tzavalis, Elias.

**Ulph, David**

TI Evaluating Welfare Losses Under Research and Development Rivalry and Product Differentiation. AU Katsoulacos, Yannis; Ulph, David.

TI Strategic Investment and the Co-existence of Labour Managed and Profit-Maximising Firms. AU Neary, Hugh M.; Ulph, David.

TI R&D and Union Bargaining: Evidence From British Companies and Establishments. AU Menezes-Filko, Naercio; Ulph, David; Van Reenen, John.

**Utikal, Klaus J.**

PD July 1995. TI Markovian Interval Processes I: Nonparametric Inference. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/486; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 23. PR no charge. JE C13, C14. KW Counting Process Regression. Nonparametric Estimation. Intensity. Markov Process. Renewal Process.

AB For the general Markovian interval process, the intensity of the elements of the counting process  $N$  at time  $t$  depends on the time intervals since a finite number of previous jumps of any of its components. We consider the problem of nonparametric functional estimation of unknown parameters of this process as well as the related problem of testing the hypothesis of independence of the parameters from some of its variables. Only one single trajectory of  $N$  is observed over time. The problem of estimating the parameters is related to the problem of hazard estimation from censored lifetimes as is further explained.

PD December 1995. TI A New Method for Detecting Neural Interconnectivity. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/505; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 28. PR no charge. JE C12, C13, C14. KW Neural Firing. Inhibition. Excitation. Stochastic Dynamics. Counting Processes.

AB We propose a class of counting process models for analyzing firing times of an ensemble of neurons. We allow the counting process intensities to be unspecified, unknown functions of the times passed since the most recent firings. Under this assumption we derive a class of statistics with their respective thresholds as well as graphical methods for detecting neural connectivity. We introduce a model under which detection is shown to be certain for long series of observations and suggest ways to estimate strength and classify the interactions as inhibition or excitation. The power of the proposed methods is compared by simulating observations from artificial networks. By analyzing empirically obtained series we obtain results which are consistent with those obtained from cross correlation based methods but in addition obtain new insights on further aspects of the interactions.

PD February 1996. TI Invariant Points of Low Dimensional Curve Families. AA University of Bonn.

**SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: A/516; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 10. PR no charge. JE C13, C14, C21.  
**KW** Kernel Smoothing. Density Estimation. Principal Component Analysis. Nonparametric Functional Prediction.  
**AB** From noisy observations of a finite family of functions an approximation in a lower dimensional space can be constructed using the method of principal components. If certain restrictions are to be satisfied by the approximation, e.g. being densities, this leads to a modified estimation procedure. It is shown that in certain dimensions this will produce a family of curves which all intersect in the same points. This property may be interpreted in some cases as a characteristic feature of regularity of the data or as an artificial creation by the device in others.

#### Vagstad, Steiner

**TI** Procurement Auctions with Entry of Bidders. AU Kjerstad, Egil; Vagstad, Steiner.

#### Valles, Javier

**TI** Investment and Financial Costs: Spanish Evidence With Panel Data. AU Estrada, Angel; Valles, Javier.

#### Van der Heyden, Ludo

**TI** Optimal Search on a Stochastic Tree With an Application to Multi- Phased R&D Scheduling. AU Rothblum, Uriel G.; Van der Heyden, Ludo.

#### Van Dierdonck, Roland

**TI** Global Plant Networks in European Multinationals. AU De Meyer, Arnoud; Van Dierdonck, Roland; Vereecke, Ann.

#### Van Reenen, John

**TI** R&D and Union Bargaining: Evidence From British Companies and Establishments. AU Menezes-Filko, Naercio; Ulph, David; Van Reenen, John.

**TI** Enterprise Restructuring in Early Transition: The Case Study Evidence From Central and Eastern Europe. AU Carlin, Wendy; Van Reenen, John; Wolfe, Toby.

**TI** Wages and Technology in British Plants: Do Workers Get a Fair Share of the Plunder? AU Chennells, Lucy; Van Reenen, John.

**TI** Innovations, Patents and Cash Flow. AU Geroski, Paul; Van Reenen, John; Wallens, Chris.

**TI** Market Share, Market Value and Innovation in a Panel of British Manufacturing Firms. AU Blundell, Richard; Griffith, Rachel; Van Reenen, John.

#### Van Wassenhove, Luk N.

**TI** Time-Based Software Development. AU Blackburn, Joseph D.; Scudder, Gary D.; Van Wassenhove, Luk N.; Hill, C.

**TI** Time-Based Software Development. AU Blackburn, Joseph D.; Scudder, Gary D.; Van Wassenhove, Luk N.; Hill, C.

**TI** Local Search Heuristics for Single Machine Scheduling With Batching to Minimize the Number of Late Jobs. AU Crauwels, H.A.J.; Potts, C.N.; Van Wassenhove, Luk N.

**TI** Software Development Effort Estimation Based on Significant Productivity Factors: General and Company Specific Models. AU Maxwell, K.; Van Wassenhove, Luk N.; Dutta, S.

**TI** Limits to Concurrency. AU Hoedemaker, G.M.; Blackburn, Joseph D.; Van Wassenhove, Luk N.

**TI** Local Search Heuristics for Single Machine Scheduling With Batching to Minimize Total Weighted Completion Time. AU Crauwels, H.A.J.; Potts, C.N.; Van Wassenhove, Luk N.

**TI** Strands of Practice in OR (The Practitioner's Dilemma). AU Corbett, C.J.; Overmeer, W.J.A.M.; Van Wassenhove, Luk N.

**TI** Knowledge Driven Quality Improvement. AU Mukherjee, A.S.; Lapre, M.A.; Van Wassenhove, Luk N.

**TI** Branch and Bound Algorithms for Single Machine Scheduling With Batch Set-Up Times to Minimize Total Weighted Completion Time. AU Crauwels, H.A.J.; Hariri, A.M.A.; Potts, C.N.; Van Wassenhove, Luk N.

**TI** An Environmental Life Cycle Optimization Model for the European Pulp and Paper Industry. AU Bloemhof-Ruwaard, J.M.; Van Wassenhove, Luk N.; Gabel, H.L.; Weaver, P.M.

**TI** What the Cases Don't Tell Us. AU Corbett, C.J.; Overmeer, W.J.A.M.; Van Wassenhove, Luk N.

**TI** Improving Speed and Productivity of Software Development: A Survey of European Software Developers. AU Blackburn, Joseph D.; Scudder, Gary D.; Van Wassenhove, Luk N.

**TI** Solving the Discrete Lotsizing and Scheduling Problem With Sequence Dependent Set-Up Costs and Set-Up Times Using the Travelling Salesman Problem With Time Windows. AU Salomon, Marc; Solomon, Marius M.; Van Wassenhove, Luk N.; Dumas, Yvan; Dauzere-Peres, Stephane.

**TI** Solving the Discrete Lotsizing and Scheduling Problem With Sequence Dependent Set-Up Costs and Set-Up Times Using the Travelling Salesman Problem With Time Windows. AU Salomon, Marc; Solomon, Marius M.; Van Wassenhove, Luk N.; Dumas, Yvan; Dauzere-Peres, Stephane.

**TI** Improving Speed and Productivity of Software Development. AU Blackburn, Joseph D.; Scudder, Gary D.; Van Wassenhove, Luk N.

#### Vanden Abeele, P.

**TI** Explaining Cross-Country Differences in Price and Distribution Effectiveness. AU Gatignon, Hubert; Vanden Abeele, P.

**TI** Explaining Cross-Country Differences in Price and Distribution Effectiveness. AU Gatignon, Hubert; Vanden Abeele, P.

#### Vega, Juan Luis

**TI** Purchasing Power Parity: An Empirical Analysis. AU Jurado, Maria Perez; Vega, Juan Luis.

**TI** An Empirical Analysis of M4 in the United Kingdom. AU Fisher, P.G.; Vega, Juan Luis.



**Venables, Anthony J.**

TI Globalization and the Inequality of Nations.  
 AU Krugman, Paul; Venables, Anthony J.

**Venturini, Alessandra**

TI Migration and Growth: The Experience of Southern Europe. AU Faini, Riccardo; Venturini, Alessandra.

**Vereecke, Ann**

TI Global Plant Networks in European Multinationals.  
 AU De Meyer, Arnoud; Van Dierdonck, Roland; Vereecke, Ann.

**Vinals, Jose**

PD September 1994. TI Building a Monetary Union in Europe: is it Worthwhile, Where do We Stand, and Where are We Going? AA CEPR. SR Centre for Economic Policy Research, Occasional Paper: n/a; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 36. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, and institutions. JE E58, F36, F33. KW EMU. Monetary Union. Transition. Structural Rigidity.

AB The paper discusses the building of a Monetary Union in Europe, and in doing so, addresses several key questions. Is it economically beneficial? Where does it stand at present? And where is it going? Each of the three main sections of the paper is devoted to the above questions. The paper concludes that EMU is likely to be beneficial to the Community as a whole. On the other hand, there may be significant benefits associated with the favorable impact of EMU on economic and financial integration, provided this takes place in an environment of more stable prices. It is nevertheless noted that the cost/benefit ratio is not likely to be equally favorable in all EC countries since there are important structural economic differences among them. In this regard, the countries which start from the most favorable positions are those whose economies are more diversified and more integrated in commercial and financial terms, and those whose goods and labor markets are freer from structural rigidities. In the remaining countries aspiring to become EMU members in the future, the best way to improve the relationship between costs and benefits would be to increase the flexibility of wages and prices.

PD not available. TI Building a Monetary Union in Europe: Is it Worthwhile, Where do we Stand, and Where are we Going? AA Banco de Espana. SR Banco de Espana Documento de Trabajo: 9412; Banco de Espana Seccion de Publicaciones, Negociado de Distribucion y Gestion, Alcala, 50, 28014 Madrid. PG 47. PR not available. JE F15, F33, F42. KW European Monetary Union. Policy Coordination. Maastricht Treaty. Exchange Rate.

AB This paper discusses the building of a Monetary Union in Europe (EMU), and in so doing, addresses three key questions: Is it economically beneficial? Where does it stand at present? And where is it going?. The first question refers to the costs and benefits of the EMU. While the paper concludes that the EMU is likely to be beneficial for the Community as a whole, the countries which will profit the most are those whose economies are more diversified, more integrated in commercial and financial terms, and most importantly, those whose goods and labor markets are freer from structural rigidities. The second question addressed concerns the transition to EMU during

Stage Two. It is concluded that only by strengthening policy coordination among member countries and by implementing the necessary changes to safeguard the cohesion of the ERM in the presence of speculative attacks, will it be possible to maintain monetary and exchange rate stability in an environment of liberalized capital flows. The recent creation of the European Monetary Institute and the automatic introduction by the Treaty of Maastricht of a number of changes in the economic and financial framework during the transition may facilitate achieving the above objectives.

TI Strategy and Tactics of Monetary Policy: Examples From Europe and the Antipodes. AU Goodhart, Charles; Vinals, Jose.

**Vines, David**

TI Bigger Trade Blocs Need Not Entail More Protection.  
 AU Sinclair, Peter J.N.; Vines, David.

**Viscusi, W. Kip**

TI Individual Differences in Subjective Risk Thresholds.  
 AU Gaba, Anil; Viscusi, W. Kip.

**Von Hagen, Jurgen**

PD September 1994. TI Social Security and Migration in an Ageing Europe. AU Von Hagen, Jurgen; Walz, Uwe. AA University of Mannheim. SR Centre for Economic Policy Research, Discussion Paper: 1022; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 25. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE H55, H71, H87, J14, J61. KW Migration. Social Security. Aging. European Integration.

AB The European aging process will lead to a dramatic rise in dependency ratios over the next decades. At the same time labor mobility will increase as a result of greater European economic integration. We analyze the implications of migration and aging for European social security systems. With uncoordinated social security policies, national pensions funds compete for contributors whose mobility is the source of indeterminacy. The viability of coordination among national social security systems depends critically on which policy parameter it is based on. The benefits from coordination are limited and coordination is unlikely to yield efficient outcomes.

**Von Thadden, Ernst-Ludwig**

PD February 1996. TI Optimal Liquidity Provision and Dynamic Incentive Compatibility. AA Departement d'Econometrie et d'Economie Politique, Ecole des HEC and Universite de Lausanne. SR Universite de Lausanne Cahiers de Recherches Economiques: 9604; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 29. PR no charge. JE D51, D92, G24. KW Liquidity. Deposit Contracts. Banking. Dynamic Programming.

AB The paper analyses the problem of optimal liquidity provision in a simple continuous-time general-equilibrium model under uncertainty. It argues that liquidity provision is subject to moral-hazard problems due to the unobservability of households' characteristics and characterizes incentive-compatible deposit contracts as second-best mechanisms to provide liquidity.

PD February 1996. TI The Term-Structure of Investment and the Banks' Insurance Function. AA Departement d'Econometrie et d'Economie Politique, Ecole des HEC and Universite de Lausanne. SR Universite de Lausanne Cahiers de Recherches Economiques: 9606; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne. BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 22. PR no charge. JE D51, D92, G21. KW Banks. Intermediation. Liquidity. Maturity Transformation.

AB The article re-examines the proposition, first formulated rigorously by Bryant (1980) and Diamond and Dybvig (1983), that in a production economy with stochastic liquidity shocks to the household sector, banks provide optimal intertemporal insurance to consumers. The paper argues that in order to understand the moral hazard problems inherent in this insurance problem, it is too narrow to consider solely the role of banks as providers of liquidity. The paper develops a model with several investment opportunities in which banks have the additional function of asset diversification. This pooling of intermediation functions is shown to reduce the moral hazard problem, thereby enhancing the stability of depository contracts and increasing the scope of the banks' insurance function.

#### Von Ungern-Sternberg, Thomas

PD February 1995. TI Kritische Überlegungen zu dem Gutachten von Professor Schips Über Die Kantonalen Gebäudeversicherungsmonopole. AA Departement d'Econometrie et d'Economie Politique and Universite de Lausanne. SR Universite de Lausanne Cahiers de Recherches Economiques: 9502; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 36. PR no charge. JE D43, L51. KW Insurance. Private. Public Provision. Price-Level.

AB In a previous paper (DEEP Discussion Paper 9405) I have argued that the Swiss cantonal housing insurance monopolies have much lower prices, than their "competitive" counterparts. Schips has tried to argue, that my conclusions are incorrect. In the present paper I explain the methodological and statistical reasons that have led Schips to his erroneous conclusions (In German).

PD April 1995. TI Reflexions Critiques a Propos de l'Expertise de Professeur Schips Sur les Monopoles Cantonaux d'Assurance Immobiliere. AA Departement d'Econometrie et d'Economie Politique and Universite de Lausanne. SR Universite de Lausanne Cahiers de Recherches Economiques: 9505; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 37. PR no charge. JE D43, L51. KW Insurance. Private and Public Provision. Price-Level.

AB In a previous paper (DEEP Discussion Paper 9405) I have argued, that the Swiss cantonal housing insurance monopolies have much lower prices, than their "competitive" counterparts. Schips has tried to argue, that my conclusions are incorrect. In the present paper I explain the methodological and statistical reasons, that have led Schips to his erroneous conclusions (In French).

PD September 1995. TI Running Down Non-Profit Organisations: the Case of the Journal of Industrial Economics. AA University of Lausanne.. SR Universite de Lausanne

Cahiers de Recherches Economiques: 9510; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 8. PR no charge. JE L31, L82, L14. KW Non-Profit Organizations. Asset Stripping. Journal of Industrial Economics.

AB This paper develops the idea that small successful non-profit organizations may be subject to danger of asset-stripping by its management. The example I use to illustrate this point is the Journal of Industrial Economics, whose managing editors' remuneration tripled in 1995.

PD September 1995. TI The Limits of Competition: Housing Insurance in Switzerland. AA University of Lausanne. SR Universite de Lausanne Cahiers de Recherches Economiques: 9511; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 8. PR no charge. JE L32, L33, G22, L89. KW Housing Insurance. Competition. Public Enterprise.

AB In Switzerland there are 7 cantons, where the housing insurance market is competitive, while in the 19 others there are local state monopolies. This paper compares the price/performance relationship of these different market forms. It is shown that for a very similar product, the state monopolies charge 70% lower prices, that they spend substantially more on fire prevention, and that they have much lower damage rates. One of the main reasons for the much higher prices of the private insurance companies is the fact that they spend considerably more on sales and administrative costs. The housing insurance market is thus a classic example of a situation where state monopoly outperforms private sector competition.

PD January 1996. TI The Swiss National Bank and Seignorage. AA University of Lausanne. SR Universite de Lausanne Cahiers de Recherches Economiques: 9601; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 21. PR no charge. JE E58, G11. KW Central Banking. Switzerland. Portfolio Choice.

AB The purpose of this paper is to study the SNB's performance in managing Switzerland's seignorage wealth. The main conclusion is that the SNB has held an asset portfolio that was excessively liquid, not sufficiently hedged and not sufficiently diversified. This risky portfolio strategy was in large part dictated by the excessive legal restrictions placed on the SNB's asset management. It has cost the Swiss tax-payer in excess of 6'000 mio. Fr. In the period 1984-94. There is an urgent need to adjust the legal constraints and the institutional rules governing the management of this huge stock of assets, while at the same time maintaining or reinforcing the SNB's independence in formulating its monetary policy. The main propositions put forward in this paper are to: a) modify the law requiring the SNB to hold only short term foreign currency assets; b) abolish the anachronistic gold coverage requirement; c) take a substantial fraction of Switzerland's financial wealth out of the control the SNB and place it in a seignorage fund. This seignorage fund would manage its assets according to the standard criteria of portfolio management; d) impose legal or constitutional restraints on this seignorage fund to prevent the government from running down its assets. The net result of these changes would be a substantial gain to the Swiss government and tax payer.

PD February 1996. TI Managerial Compensation Schemes with Informed Principals. AA University of Lausanne. SR Universite de Lausanne Cahiers de Recherches Economiques: 9605; Departement d'Economie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 16. PR no charge. JE D23, D82, J33. KW Informed Principal. Incentive Contracts. Profit Participation.

AB The paper studies managerial compensation schemes for situations where the current management knows more about the company's expected profitability than the new employee. When a manager is offered a contract with only a low fixed salary but a high profit participation, he will be afraid that the company's profit outlook may be quite bad. Employers are aware of this. In equilibrium the high profit employers will offer their new managers high fixed salaries and low profit participations. They do this to credibly signal to their new employees that they are high profit types. Low profit firms on the other hand will offer contracts with high profit participation and low fixed wages. One can thus easily explain the prevalence of contracts with high fixed salaries, without having to appeal to the employee risk aversion.

TI Competition Policy in Switzerland. AU Neven, Damien; Von Ungern-Sternberg, Thomas.

#### Von Weizsacker, Robert K.

PD June 1994. TI Public Pension Reform, Demographics, and Inequality. AA University of Halle-Wittenberg. SR Centre for Economic Policy Research, Discussion Paper: 978; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 22. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE D31, H55, J18. KW Income Distribution. Population Aging. Social Security. Policy Conflicts. Social Policy.

AB Starting from a simple, descriptive model of individual income, an explicit link between the age composition of a population and the personal distribution of incomes is established. Demographic effects on income inequality are derived. Next, a pay-as-you-go financed state pension system is introduced. The resulting government budget constraint entails interrelations between fiscal and demographic variables, causing an additional, indirect demographic impact on the distribution. This is shown not only to change, but in some cases even to reverse the distributional incidence of an aging population. Several policy conflicts arise. The point is re-emphasized by an analysis of the German Pension Reform Act of 1992. The study reveals that the design of the pension formula decisively drives the relation between demographics and inequality.

PD September 1994. TI Educational Choice, Lifetime Earnings, Inequality, and Conflicts of Public Policy. AA University of Halle-Wittenberg. SR Centre for Economic Policy Research, Discussion Paper: 1014; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 20. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE D31, H31, I21, J18. KW Human Capital. Earnings Inequality. Public Education. Distributional Policy.

AB Drawing on and extending the theory of human capital, a comprehensive life-cycle model of individual earnings is designed. The approach taken permits an isolated analysis of

three interconnected levels of aggregation (intra-cohort distribution, overall distribution, and lifetime distribution) within the same dynamic microeconomic model of educational choice. In this way, interrelated economic, demographic, and fiscal effects on earnings inequality are established. The paper reveals that reallocation reactions of optimizing individuals, combined with population heterogeneity by productive endowments, learning abilities, and working age, can destroy simple relationships between the standard of living, current earnings inequality, lifetime inequality, and public distributional policy.

#### Vorst, Ton C.F.

TI Mixtures of Tails in Clustered Automobile Collision Claims. AU Kalb, Guyonne R.J.; Kofman, Paul; Vorst, Ton C.F.

TI A Threshold Error Correction Model for Intraday Futures and Index Returns. AU Martens, Martin; Kofman, Paul; Vorst, Ton C.F.

#### Voth, Hans-Joachim

PD November 1995. TI Did Smallpox Reduce Height? Stature and the Standard of Living in London, 1770-1873. AU Voth, Hans-Joachim; Leunig, Timothy. AA Voth: Clare College, Cambridge. Leunig: Nuffield College, Oxford. SR University of Oxford, Discussion Papers in Economic and Social History: 1; Avner Offer, Nuffield College, Oxford, OX1 1NF. PG 30. PR not available. JE I18, N33. KW Anthropometric Measures. Standard of Living. Height. Smallpox.

AB In this paper, we re-examine the effect of smallpox on the height attained by those who suffered from this disease. To this end, we analyze a dataset assembled by Floud, Wachter and Gregory on the height of recruits into the Marine Society, 1770-1873. Using both time series and cross-sectional analysis, we show that smallpox was indeed an important determinant of height: those who had suffered from smallpox were significantly shorter. This suggests that the increase in heights documented by Floud et al. may be explained not just by increased nutritional intake, but also by the eradication of smallpox.

#### Vulkan, Nir

TI Uncertainty and Endogenous Selection of Macroeconomic Equilibrium. AU Scaramozzino, Pargnale; Vulkan, Nir.

#### Wachter, Susan M.

TI Wealth Accumulation and Housing Choices of Young Households: An Exploratory Investigation. AU Haurin, Donald R.; Hendershott, Patric H.; Wachter, Susan M.

#### Wagner, Karin

TI Human Capital and Productivity in Manufacturing during the Twentieth Century: Britain, Germany and the United States. AU Broadberry, Stephen N.; Wagner, Karin.

#### Wallens, Chris

TI Innovations, Patents and Cash Flow. AU Geroski, Paul; Van Reenen, John; Wallens, Chris.

**Walter, I.**

TI Rethinking Emerging Markets. AU Smith, R.C.; Walter, I.

PD July 1995. TI European Financial Market Integration: The Problem of Clearance and Settlements. AU Walter, I.; Saunders, A.; Giddy, I. AA Walter: INSEAD, Saunders and Giddy: New York University. SR INSEAD, Working Papers: 95/63/EP; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 55. PR not available. JE F36, G15. KW European Financial Market. Securities Clearance. Settlements Process. Market Efficiency.

AB In this paper, the economies of financial market utilities in Europe, notably those involved in the securities clearance and settlements process, are examined in the context of the creation of an efficient, unified Pan-European capital market. Various models of cross-border clearance and settlement are considered, with the conclusion that the multiple-access model among national and international transactions utilities and custodians is probably in the best interests of end-users and financial market efficiency.

TI Barriers to European Financial Market Integration: Clearance and Settlement of Equities. AU Giddy, I.; Saunders, A.; Walter, I.

**Walz, Uwe**

TI Social Security and Migration in an Ageing Europe. AU Von Hagen, Jurgen; Walz, Uwe.

**Wang, Fuhmei**

PD February 1996. TI The Evolution of Financial Premium and Real Exchange Rate. Misalignment Under Dual Exchange Rates. AA The University of Birmingham. SR University of Birmingham, Department of Economics, Discussion Paper: 96/08; Department of Economics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UNITED KINGDOM. PG 38. PR 2 pounds. JE F32, F33, F41. KW Dual Exchange Rates. Financial Premium. Spread. Correlation.

AB The literature overwhelmingly believes that an over (under) valued real exchange rate is associated with high (low) financial premiums under dual exchange rates. We wish to oppose this view. The strategy in this paper is to build an intertemporal optimization model of financial premium change under such a regime. We also extend the analysis of the theoretical model by discussing computer simulations and using country evidence. The theoretical model, the numerical simulations, and the descriptive data analysis together show that such a relationship does not exist. In this sense, this paper provides a new set of results.

**Warne, Anders**

TI Common Trends Analysis of Danish Unemployment. AU Hansen, Henrik; Warne, Anders.

**Waysand, Claire**

TI The Role of Government Aid to Firms During the Transition to a Market Economy: Russia 1992-94. AU Melitz, Jacques; Waysand, Claire.

**Weaver, P.M**

PD February 1995. TI Optimising Environmental Product Life Cycles: A Case Study of the European Pulp and Paper

Sector. AU Weaver, P.M.; Gabel, H.L.; Bloemhof-Ruwaard, J.M.; Van Wassenhove, Luk N. AA Weaver: University of Durham. Gabel and Van Wassenhove: INSEAD. Bloemhof-Ruwaard: Wageningen Agricultural University. SR INSEAD, Working Papers: 95/29/EP; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 28. PR not available. JE F42, L52, L73, Q23. KW Environmental Policy. Pulp and Paper. Recycling. Sectoral Configuration. Environment-Trade Conflicts.

AB Policy makers are seeking to reduce the environmental impact of the European pulp and paper sector by influencing technology choices throughout its life cycle. Because of its preoccupation with existing technologies, policy risks causing perverse environmental outcomes or adverse effects on some countries' industry and trade. The scientific basis for preferring one technology over another is unclear. We explore these concerns in the case of mandatory fiber recycling using an approach that combines materials accounting methods and operational research techniques. We find that minor changes in technological assumptions result in sharply different environmental optima for the sector. Recycling offers rapid improvement in environmental performance with geographical specialization in production. An alternative to cleaner primary pulp production plus energy recovery offers potentially greater long term environmental improvement and greater geographical self-sufficiency. An important policy implication is that a level of recycling is needed in the short term that will reduce environmental impacts but not lock out progress on cleaner pulping technologies. Not all paper grades should contain secondary fiber. Our results reconfirm that regulatory policy instruments may unnecessarily limit the overall potential to reduce environmental impacts.

**Weber, Axel A.**

PD October 1994. TI Foreign Exchange Intervention and International Policy Coordination: Comparing the G-3 and EMS Experience. AA Universitat Bonn. SR Centre for Economic Policy Research, Discussion Paper: 1038; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 33. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE E58, F31, F33. KW Central Banking. Sterilization. Policy Coordination. Exchange Rates. EMS.

AB The paper aims to develop understanding of why and how central banks have intervened in foreign exchange markets, and whether intervention was (i) coordinated, (ii) sterilized, and (iii) effective. The experience in the G-3 context is compared with the past EMS experience. In addition to foreign exchange intervention, the issue of international monetary policy coordination is discussed, again both within the G-3 and the EMS context. It is shown that the G-3 countries have relied primarily on coordinated intervention without any significant commitment to other forms of policy coordination in stabilizing exchange rates. The EMS countries, on the other hand, have at least to some extent resorted to short-term interest rate policy coordination in addition to coordinated intervention.

PD October 1994. TI Testing Long-Run Neutrality: Empirical Evidence for G7 Countries with Special Emphasis on Germany. AA Universitat Bonn. SR Centre for Economic Policy Research, Discussion Paper: 1042; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 31. PR 1 pound (\$2) individuals; 1.50

pounds (\$3) companies, libraries, institutions. **JE** E31, E43, E52. **KW** Unit Roots. Vector Autoregressions. Long Run. Neutrality. Superneutrality.

**AB** Modern neo-Keynesian, new classical, and real business cycle models typically differ in the degree to which they incorporate long-run or short-run neutrality propositions. Despite their importance, little firm international evidence on the validity of these neutrality hypotheses is available to date. This paper applies a bivariate VAR approach to test the long-run restrictions implied by a number of neoclassical neutrality propositions. The evidence from the G7 countries appears to be consistent with the long-run neutrality of money and the vertical Phillips curve, but the data largely refute the long-run super-neutrality of money and the "Fisher effect" of inflation on interest rates.

**TI** The Impact of Exchange Rate Fluctuations on European Union Trade. **AU** Sapir, Andre; Sekkat, Khalid; Weber, Axel A.

#### Weibull, Jorgen W.

**TI** Evolutionary Selection Against Dominated Strategies. **AU** Hofbauer, Josef; Weibull, Jorgen W.

#### Weidmann, Jens

**TI** Central Bank Independence and Seigniorage: the Banque de France. **AU** Wesche, Katrin; Weidmann, Jens.

#### Weiss, A.M

**PD** June 1995. **TI** The Impact of Legitimacy on the Choice of Sales Organization: An Institutional Theory Perspective. **AU** Weiss, A.M.; Anderson, E. **AA** Weiss: University of Southern California. Anderson: INSEAD. **SR** INSEAD, Working Papers: 95/59/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 33. **PR** not available. **JE** L21, L22. **KW** Vertical Integration. Firm Legitimacy. Sales Organization.

**AB** This paper presents and empirically examines a previously untested theoretical explanation for why a sales organization structure is changed. We draw on institutional theory which argues that organizational actions are often motivated by a desire to increase the organization's legitimacy. We assess whether decision makers' perceptions of legitimacy (or the lack thereof) appear to impact the decision of whether to vertically integrate the selling function. We also examine whether legitimacy concerns are related to the decision whether to shift the selling contract to a different independent sales force, one which may enhance the manufacturer's legitimacy. Using survey data, we find support for the plausibility of a legitimacy motive and clarify the underlying mechanism of institutional theory. The implications of the study for managerial behavior and the literatures on channels research, organizational governance, and institutional theory are discussed.

#### Weitz, B.

**TI** Performance in Principal-Agent Dyads: The Causes and Consequences of Perceived Asymmetry of Commitment to the Relationship. **AU** Ross, Jr. W.T.; Anderson, E.; Weitz, B.

#### Wen, Jean-Francois

**TI** Political Uncertainty, Capital Taxation, and Growth.

**AU** Devereux, Michael B.; Wen, Jean-Francois.

#### Werner, Alejandro M.

**PD** November 1995. **TI** Target Zones and Realignment Expectations: the Israeli and Mexican Experience. **AA** International Monetary Fund. **SR** International Monetary Fund, Working Paper: 95/114; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 11. **PR** not available. **JE** F31, O53, O54. **KW** Foreign Exchange. Target Zone. Mexico. Israel.

**AB** This paper studies the Mexican and Israeli experience with a target zone. The first part of the paper develops a model of exchange rate determination under a target zone regime with stochastic realignments, and examines the conditions under which the adoption of the target zone, instead of a fixed exchange rate, reduces the volatility of the interest rate differential. We conclude that if the variance of the expected realignment is sufficiently large, then the target zone will be useful. The second part of the paper is an empirical study that shows that the target zone regime helped reduce interest rate variability in Israel and Mexico by absorbing part of the shocks to the expected realignment with movements of the exchange rate inside the band.

#### Werner, Hans Joachim

**PD** 1995. **TI** A Blue Decomposition in the General Linear Regression Model. **AU** Werner, Hans Joachim; Yapar, Cemil **AA** Werner: University of Bonn. Yapar: Karadeniz Technical University. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/326; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrass 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 10. **PR** no charge. **JE** C20, C12, C51. **KW** Linear Regression. Rank Deficiency. Linear Constraints. Blue. Dispersion.

**AB** In this note we consider the general linear regression model where the block partitioned regressor matrix may be deficient in column rank, the dispersion matrix is possibly singular, and some coefficients are possibly subject to consistent linear constraints. Of much interest for use is the traditional BLUE (best linear unbiased estimator). We show how this traditional BLUE can be obtained from the traditional BLUE of the partial regression of the nonrestricted regressors. Some properties of the dispersion matrix of the traditional BLUE of the complete, unrestricted model are also given.

#### Wesche, Katrin

**PD** February 1995. **TI** Central Bank Independence and Seigniorage: the Banque de France. **AU** Wesche, Katrin; Weidmann, Jens. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/307; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrass 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 30. **PR** no charge. **JE** E42, E58. **KW** Central Bank Independence. Seigniorage. Banque de France.

**AB** One prominent characteristic of independent central banks is the legal limitation of the central bank's lending to the government. Although a priori we expect a strong link between the legal restriction on central bank credit to the government and seigniorage, the empirical cross-country evidence in favor of this hypothesis is rather tenuous pointing to a poor compliance to these restrictions. On balance, these cross-section studies suggest that, though central bank independence

is not a sufficient condition to avoid excess expansion of the monetary base, at best it can be considered a necessary condition. In this paper we intend to supplement the cross-section evidence through a case study of regime changes in a single country. The case of France is particularly interesting as the French monetary system was highly administered until 1985 when radical reforms were implemented. These events are reflected in the development of seigniorage revenue.

**TI** Divergent Trends in the Velocity of Money.  
**AU** Neumann, Manfred J.M.; Wesche, Katrin.

**PD** November 1995. **TI** The Stability of European Money Demand: An Investigation of M3H. **AA** University of Bonn. **SR** Universität Bonn Sonderforschungsbereich, Discussion Paper: B/337; Sonderforschungsbereich 303 an der Universität Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 33. **PR** no charge. **JE** E41, E52, C22. **KW** Demand for Money. European Monetary Union. Cointegration.

**AB** This paper tries to assess the stability and predictive performance of a European money demand function in comparison to national money demand relations. As there are no theoretical arguments for the choice of an exchange rate, three different possibilities for the conversion of the aggregate variables into a common currency are considered. While conversion with purchasing power parities and with base-year exchange rates give similar results, the use of current exchange rates leads to implausible estimates. Irrespective of the exchange rate chosen, the national functions perform better than the aggregated function with respect to the predictive accuracy. Inspection of the residuals of the national money demand equations indicates that currency substitution is not the major cause for the stability of the aggregated demand function. The aggregate relation seems mainly to reflect German money demand. This conclusion is supported by the instability of aggregated money demand resulting from the exclusion of Germany from the aggregate.

#### Wessels, Joachim H.

**PD** August 1995. **TI** The Design of Incentives in the Presence of Lobbying Activity. **AA** University of Bonn. **SR** Universität Bonn Sonderforschungsbereich, Discussion Paper: A/489; Sonderforschungsbereich 303 an der Universität Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. **PG** 25. **PR** no charge. **JE** D23, D72, D82, J33. **KW** Lobbying. Rent-Seeking. Principal/Agent Theory. Incentives. Relative Performance Evaluation.

**AB** The effects of unproductive lobbying have so far mainly been addressed by the public choice literature on rent-seeking and by Milgrom/Roberts' (1988, 1990) work on influence activities in organizations. Our paper makes an attempt to incorporate lobbying into the simple principal-agent framework that was proposed by Homstrom/Milgrom (1991). This framework has been used by Itoh (1992) to analyze the costs and benefits of relative performance evaluation (RPE), a method of pay that can reduce agency costs by inducing competition between agents. One of Itoh's main findings is that the principal may prefer the agents to cooperate if there exists productive interactions that cause sabotage under a system of RPE. In our model, each of the two agents can affect the output signal that determines his pay both by productive effort and by unproductive lobbying that makes his performance appear better. We show first that the presence of lobbying leads to

lower-powered incentives in the optimal contract. Secondly, complementing Itoh's finding, we conclude that even if there are no productive interactions between agents, RPE may be non-optimal, because its use would provide the agents with an additional incentive to engage in lobbying. In this case, the principal will instead create a positive interdependence between agents' incomes (a kind of implicit team-work) to reduce the attractiveness of lobbying.

#### Weymark, John A.

**PD** February 1995. **TI** John Harsanyi's Contributions to Social Choice and Welfare Economics. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 95/07; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 9. **PR** 20 cents per page Canadian to other than educational institutions. **JE** D71, D63. **KW** John Harsanyi. Utilitarianism. Social Choice. Welfare Economics.

**AB** This article provides an overview of John Harsanyi's contributions to Social Choice and Welfare Economics.

**PD** March 1995. **TI** On Kolm's Use of Epistemic Counterfactuals in Social Choice Theory. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 95/11; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 36. **PR** 20 cents per page Canadian to other than educational institutions. **JE** B41, D71. **KW** Social Choice. Counterfactual Choice. Veil of Ignorance. Arrow, Kenneth.

**AB** Serge Kolm's "epistemic counterfactual principle" says that a social choice only needs to be made from the actual feasible set of alternatives given the actual preference profile, but for this choice to be rational it must be justified by the choices which would have been made in appropriate counterfactual choice situations. Kolm's principle does not identify the relevant counterfactuals. I suggest that the appropriate counterfactuals to justify an impartial social choice are all the choice situations a moral agent behind a veil of ignorance might think is the actual choice situation outside the veil.

**TI** Social Welfare Orderings for Ratio-Scale Measurable Utilities. **AU** Tsui, Kai-Yuen; Weymark, John A.

#### Wheatley, Simon

**TI** How Reliable are Adverse Selection Models of the Bid-Ask Spread? **AU** Neal, Robert; Wheatley, Simon.

#### Whittaker, Julie

**TI** Efficiency, Environmental Contaminants and Farm Size: Testing for Links Using Stochastic Production Frontiers. **AU** Hadri, Kaddour; Whittaker, Julie.

#### Whittington, Geoffrey

**TI** The Withdrawal of Current Cost Accounting in the United Kingdom: a Study of the Accounting Standards Committee. **AU** Pong, Christopher K.M.; Whittington, Geoffrey.

**TI** The Logic and Alternative Measurement Systems in Financial Accounting. **AU** Gutierrez, J.M.; Whittington,

Geoffrey.

### Wickens, M.R

TI The Persistence in Volatility of the U.S. Term Premium 1970-1986. AU Tzavalis, Elias; Wickens, M.R.

### Widgren, Mika

PD October 1994. TI The Relation Between Voting Power and Policy Impact in the European Union. AA Yrjo Jahnsson Foundation. SR Centre for Economic Policy Research, Discussion Paper: 1033; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 15. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE C71, C72, F02. KW European Union. Cooperative Game Theory. Voting Power.

AB We examine national effects on the common policies of the European Union (EU). The paper establishes a difference between national influence on voting outcomes and policies. It is assumed that policies of the EU are public goods and Holler's public good power index is applied. The method is extended to cover voting games with coalitions to reveal also the effects of cooperation on policies. We show that small countries have more influence on common policies of the EU than on voting outcomes. Coalitions formation can, however, ruin this since even coalitions smaller than the blocking minority can control policy.

### Williamson, P.J

TI Corporate Diversification and Organizational Structure: A Resource- Based View. AU Markides, C.C.; Williamson, P.J.

TI Corporate Restructuring: How Joint Ventures Can Help Ease the Pain. AU Nanda, A.; Williamson, P.J.

TI Corporate Restructuring Through Transitory Joint Ventures. AU Nanda, A.; Williamson, P.J.

### Winklemann, Rainer

PD July 1994. TI Training, Earnings and Mobility in Germany. AA Dartmouth College. SR Centre for Economic Policy Research, Discussion Paper: 982; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 24. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE J24, J31. KW Apprenticeship. Earnings Regressions. Human Capital. Germany.

AB An increase in youth unemployment and a bi-modal wage distribution in the United States have generated interest in the structure and performance of alternative labor markets. In particular, comparatively satisfactory outcomes in the German labor market are said to have been determined by the interplay of the educational system and a number of training programs. This paper examines the performance of the German labor measured along two dimensions: earnings and mobility. Thereby, it assesses the relative merits of different training choices as distinguished by duration and specificity of the human capital acquired. Having established the extent to which the various training programs affect labor mobility, the paper provides additional evidence on the magnitude of wage differentials and the sources of earnings growth.

PD October 1994. TI Apprenticeship and After: Does it

Really Matter? AA Dartmouth College. SR Centre for Economic Policy Research, Discussion Paper: 1034; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 21. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE J22, J64. KW Labor Market Entrance. Job Tenure. Unemployment.

AB Using data from the German socio-economic panel this paper analyzes the labor market entrance of former apprentices, as well as of university and full-time school graduates. There are three main findings. First, the retention rate of apprentices in their training firms is fairly low. Second, the transition to employment involves unemployment periods for many individuals, and two out of three first employment spells end within five years. Third, the main determinant for post-apprenticeship tenure is firm size of the training company. The expected tenure is the same for individuals staying with their training firm and individuals moving jobs. The findings reveal that apprenticeship training is a less secure way to stable employment than is often assumed. Also, they cast doubt on standard human capital explanations of apprenticeship training.

### Winter, Eyal

TI A Necessary and Sufficient Epistemic Condition for Playing Backward Induction. AU Balkenborg, Dieter; Winter, Eyal.

### Winter-Ebmer, Rudolf

PD July 1994. TI Do Immigrants Displace Native Workers? The Austrian Experience. AU Winter-Ebmer, Rudolf; Zweimuller, Josef. AA Johannes Kepler Universitat Linz. SR Centre for Economic Policy Research, Discussion Paper: 991; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 14. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE J15, J61, J64. KW Immigration. Unemployment Risk. Native Workers.

AB This paper studies the effect of increased immigration in Austria on the risk to natives of becoming unemployed. Austria experienced a dramatic rise in the share of alien workers as a result of the breakdown of the former communist regimes (especially that of the former Yugoslavia). We concentrate on entry into unemployment of young male workers who are thought to compete most with new immigrants. Our results indicate that the detrimental impact -- if it exists at all -- is only minor and is irrespective of the chosen proxy for competition (the share of foreign workers in an industry, in a region or at the firm level).

### Winters, L. Alan

PD August 1994. TI The Liberalization of European Steel Trade. AA The World Bank. SR Centre for Economic Policy Research, Discussion Paper: 1002; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 33. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F13, F14, F15. KW Steel. Integration. Europe. Europe Agreements. Modelling.

AB This paper constructs a simple model of the steel sector in Europe distinguishing eight West and two East European regions. It models the production of steel and also the various trade restrictions extant in 1992. It uses this model, first, to calculate the output and welfare effects of rationalizing the

sector to remove the excess capacity experienced in 1992 and second, to explore the consequences of the mutual trade liberalization between Eastern and Western Europe envisaged under the Europe Agreements. The latter allow major increases in output in the East (18 percent) and offer Western steel users significant welfare benefits (ESU 190 million). Eastern consumers and Western producers suffer (smaller) losses, but total output in the EU falls only by about 1.5 percent.

PD October 1994. TI Who Should Run Trade Policy in Eastern Europe and How? AA The World Bank. SR Centre for Economic Policy Research, Discussion Paper: 1043; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 40. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F13, H11, K39, K33. KW Trade Policy. Central Europe. Eastern Europe. Political Economy. Institutions.

AB This paper discusses the design of appropriate institutions for trade policy-making in Central and Eastern Europe. Drawing on US and EU experience it argues that legislatures should set the broad parameters, leaving commodity-specific detail to the executives. Sectoral Ministries, e.g. of Agriculture, Energy or Industry, should not control trade policy, a task which should fall to a special Ministry with close links to the Treasury and Ministry of Foreign Affairs. It should be clear precisely who is responsible for trade policy and the public should be informed both of their general interest in trade policy and of the costs and benefits of any particular action.

#### Withagen, Cees

TI Single-Peakedness and Initial Sustainability in Capital Resource Economies. AU Pezzey, John; Withagen, Cees.

#### Wolf, Holger

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

#### Wolfe, Toby

TI Enterprise Restructuring in Early Transition: The Case Study Evidence From Central and Eastern Europe. AU Carlin, Wendy; Van Reenen, John; Wolfe, Toby.

#### Wolfgang, N.C

PD April 1995. TI Simulation as a Useful Tool in Examining Waste Production. AU Wolfgang, N.C.; Ayres, Leslie W. AA Wolfgang; Drexel University. Ayres; INSEAD. SR INSEAD, Working Papers: 95/41/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 24. PR not available. JE C61, C81, Q20, Q30. KW Environmental Economics. Materials Balance. Chemical Components. Simulation.

AB Materials balance analysis provides a powerful tool for improving the accuracy of environmental economic studies. It is possible to use current "off-the-shelf" computer models to create a database of standard industrial processes that are balanced in terms of individual chemical components. This paper outlines the procedures involved in the simulation of such industrial processes and presents a sample application.

#### Wong, Kam-Chau

PD November 1995. TI Excess Demand Functions, Equilibrium Prices and Existence of Equilibrium. AA Chinese University of Hong Kong. SR University of Minnesota, Center for Economic Research, Discussion Paper: 283; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. PG 36. PR no charge. JE D51, D11. KW Excess Demand. Demand Functions. Exchange Economy. Equilibrium. Fixed-Point Theorem.

AB For continuous excess demand functions, the existing literature (e.g., Sonnenschein (1972, 1973), Mantel (1974), Debreu (1974), Mas-Colell (1977), etc.) achieves a complete characterization only when the functions are defined on special subsets of positive prices. In this paper, we allow the functions to be defined on a larger class of price sets, (allowing, for example, the closed unit simplex, including its boundary). Besides characterizing excess demands for a larger class of economies, it is also a useful tool for proving other results. It allows us to characterize the equilibrium price set for a larger class of economies. It also permits extending Uzawa's observation (1962), by showing that Brouwer's Fixed-Point Theorem is implied by the Arrow-Debreu Equilibrium Existence Theorem ((1954), Theorem 1).

#### Wren-Lewis, Simon

TI How Robust are FEERs? AU Driver, Rebecca; Wren-Lewis, Simon.

TI European Monetary Union, Asymmetric Shocks and Inertia. AU Driver, Rebecca; Wren-Lewis, Simon.

#### Wu, Ping

PD August 1995. TI Small-Sample Power of Tests for Inequality Restrictions: The Case of Quarter-Dependent Regressor Errors. AU Wu, Ping; King, Maxwell L. AA Wu; University of Melbourne. King; Monash University. SR Monash University, Department of Econometrics, Monash Working Paper: 7/95; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. PG 15. PR no charge. JE C12. KW Inequality Restrictions. Locally Most Mean Powerful. Kuhn-Tucker Test. Size and Power. Critical Value Bounds.

AB Testing for inequality restricted hypotheses has obtained increasing attention in recent years in econometrics. While many tests have been proposed for these testing problems, little is available on the power of these tests. In this paper, we examine the power of two tests in the literature, the locally most mean powerful invariant test and the Kuhn-Tucker test, in the case of testing for quarter-dependent simple AR(4) errors in linear regressions.

#### Wyplosz, Charles

TI French Post-War Growth: From (Indicative) Planning to (Administered) Market. AU Sicsic, Pierre; Wyplosz, Charles.

#### Xepapadeas, Anastasios

TI Environmental Policy Under Oligopoly with Endogenous Market Structure. AU Katsoulacos, Yannis; Xepapadeas, Anastasios.

#### Xuereb, J.M

TI Strategic Orientation of the Firm and New Product



Performance. AU Gatignon, Hubert; Xuereb, J.M.

TI Strategic Orientation of the Firm and New Product Performance. AU Gatignon, Hubert.; Xuereb, J.M.

#### Yalcin, Erkan

TI Endogenous Firm Objectives. AU Renstrom, Thomas; Yalcin, Erkan.

#### Yapar, Cemil

TI A Blue Decomposition in the General Linear Regression Model. AU Werner, Hans Joachim; Yapar, Cemil

#### Yip, Chong K.

TI Protection in a Dynamic Macroeconomic Model with Imperfect Competition. AU Fender, John; Yip, Chong K.

#### Zenner, Markus

PD May 1995. TI OLS-Learning in Non-Stationary Models with Forecast Feedback. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich, Discussion Paper: B/315; Sonderforschungsbereich 303 an der Universitat Bonn, Lennestrasse 37, D53113, Bonn 1, DEUTSCHLAND. PG 24. PR no charge. JE C22, C62, D83. KW Rational Expectations Equilibrium. Boundedly Rational Learning. Stochastic Approximation. Non-Stationarity. AB In this study we consider a linear model with forecast feedback in which boundedly rational agents are learning the parameter values of the rational expectations equilibrium by the OLS learning procedure. We show strong consistency of the OLS estimates under much weaker assumptions on the involved time series than the ones usually employed. This result extends the boundedly rational learning approach to models including non-stationary time series, like processes with polynomial trends or unit root autoregressive processes, and indicates that the idea that agents can learn only stationary rational expectations equilibria is misleading.

#### Zenou, Yves

TI Firm Location and Job Creation in Cities. AU Fujita, Masahisa; Thisse, Jacques-Francois; Zenou, Yves.

#### Zhang, Lei

TI Designing Monetary Policy When Unemployment Exists. AU Lockwood, Ben; Miller, Marcus; Zhang, Lei.

TI Optimal Target Zones: How an Exchange Rate Mechanism Can Improve Upon Discretion. AU Miller, Marcus; Zhang, Lei.

#### Zieschang, Kimberly D.

PD November 1995. TI Methodologies of Price Indices in Transition Countries. AA International Monetary Fund. SR International Monetary Fund, Working Paper: 95/106; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 49. PR not available. JE C43, E31. KW Price Index. Methodology.

AB Since late 1991, the IMF Statistics Department has conducted a program of technical assistance on consumer and producer price measurement and index compilation for the countries that have emerged from the former Soviet Union. These countries whose economies are in various states of transition from centrally planned to market organization, and

face special difficulties in developing price indices meeting international methodological guidelines for use in setting and monitoring the progress of macroeconomic policy. This paper describes and summarizes the findings of this technical assistance work with transition economies over the past four years, and the methodology developed by Fund experts to adapt international guidelines to the prevailing economic conditions. The paper catalogs the measurement problems and issues for compiling consumer and producer price indices in the transition context, and also comments on the use of these price series in compiling constant price national accounts.

#### Zimmerman, David J.

TI The Effect of Medicaid Abortion Funding Restrictions on Abortions, Pregnancies, and Births. AU Levine, Phillip B.; Trainor, Amy B.; Zimmerman, David J.

#### Zweimuller, Josef

TI Do Immigrants Displace Native Workers? The Austrian Experience. AU Winter-Ebmer, Rudolf; Zweimuller, Josef.