

ABSTRACTS OF WORKING PAPERS IN ECONOMICS

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

Abraham, Jean

PD October 1999. **TI** Enter at Your Own Risk: HMO Participation and Enrollment in the Medicare Risk Market. **AU** Abraham, Jean; Arora, Ashish; Gaynor, Martin; Wholey, Douglas. **AA** Abraham and Arora: Carnegie Mellon University. Gaynor: Carnegie Mellon University and NBER. Wholey: University of Minnesota. **SR** National Bureau of Economic Research Working Paper: 7385; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** \$5.00. **JE** I11, I18, J14, L10. **KW** Health. HMOs. Medicare.

AB We examine HMO participation and enrollment in the Medicare risk market for the years 1990 to 1995. We develop a profit-maximization model of HMO behavior, which explicitly considers potential linkages between an HMO's production decision in the commercial enrollee market and its participation and production decisions in the Medicare risk market. Our results suggest that the payment rate is a primary determinant of HMO participation, while the price of a supplemental Medicare insurance policy positively affects HMO Medicare enrollment. We also find empirical support for the existence of complementarities in the joint production of an HMO's commercial and Medicare products.

Acemoglu, Daron

PD February 2000. **TI** Labor- and Capital-Augmenting Technical Change. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7544; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 21. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside US). **JE** E25, O14, O31, O33. **KW** Industrialization. Technological Change.

AB This paper analyzes an economy in which profit-maximizing firms can undertake both labor- or capital-augmenting technological improvements. In the long run, the economy looks like the standard growth model with purely labor-augmenting technical change, and the share of labor in GDP is constant. Transitionally, however, there is capital-augmenting technical change and factor shares change. A range of policies may have counterintuitive implications due to their effect on the direction of technical change. For example, taxes on capital income reduce the labor share in the short run but increase it in the medium/long run.

PD April 2000. **TI** The Labor Market and Corporate Structure. **AU** Acemoglu, Daron; Newman, Andrew F. **AA** Acemoglu: MIT. Newman: University College London. **SR** University College London Discussion Papers in

Economics: 2000/08; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 27. **PR** 4 pounds or \$8.00. **JE** J23, J38, J41, L23, M12. **KW** Corporate Structure. Efficiency Wages. Labor Market Regulations. Monitoring. Moral Hazard.

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

PD September 2000. **TI** Deunionization, Technical Change and Inequality. **AU** Acemoglu, Daron; Aghion, Philippe; Violante, Giovanni L. **AA** Acemoglu: MIT. Aghion: UCL and Harvard University. Violante: UCL and CEPR. **SR** University College London Discussion Papers in Economics: 2000/12; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 38. **PR** 4 pounds or \$8.00. **JE** J24, J31, J51, J52, O33. **KW** Skill Bias. Technological Change. Training. Wage Inequality. Unions.

AB Over the past 25 years, the US and the UK experienced sharp increases in wage inequality and rapid deunionization. We argue that these two phenomena are related, and that skill-biased technical change is at the root of deunionization as well as the rise in inequality. Skill-biased technical change causes deunionization because it increases the outside option of skilled workers, undermining the coalition among skilled and unskilled workers supporting unions. Our approach implies that although deunionization is not the direct cause of the increase in inequality, it amplifies the direct effect of skill-biased technical change by removing the wage compression imposed by unions. We also show that deunionization may happen inefficiently.

PD October 1999. **TI** A Theory of Political Transitions. **AU** Acemoglu, Daron; Robinson, James A. **AA** Acemoglu: Massachusetts Institute of Technology. Robinson: University of Southern California. **SR** Centre for Economic Policy Research Discussion Paper: 2277; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** D72, D74, O15, P16. **KW** Democracy. Dictatorship. Inequality. Political

Instability. Redistribution.

AB This paper develops a theory of political transitions inspired in part by the experiences of Western Europe and Latin America. Nondemocratic societies are controlled by a rich elite. The initially disenfranchised poor can contest power by threatening social unrest or revolution, and this may force the elite to democratize. Democracy may not consolidate because it is more redistributive than a nondemocratic regime, and this gives the elite an incentive to mount a coup. Because inequality makes democracy more costly for the elite, highly unequal societies are less likely to consolidate democracy and may end up oscillating between regimes or in a nondemocratic repressive regime. An unequal society is likely to experience fiscal volatility, but the relationship between inequality and redistribution is nonmonotonic; societies with intermediate levels of inequality consolidate democracy and redistribute more than both very equal and very unequal countries. We also show that asset redistribution, such as educational and land reform, may be used to consolidate both democratic and nondemocratic regimes.

PD October 1999. **TI** Democratization or Repression?
AU Acemoglu, Daron; Robinson, James A. **AA** Acemoglu: Massachusetts Institute of Technology. Robinson: University of Southern California. **SR** Centre for Economic Policy Research Discussion Paper: 2278; CEPR, 90- 98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 20. **PR** 5 pounds, \$8 or 8 euros. **JE** D72, D74, O15, P16. **KW** Democracy. Redistribution. Repression. Revolution.

AB Regimes controlled by a rich elite often collapse and make way for democracy amidst widespread social unrest. Such regime changes are often followed by redistribution to the poor at the expense of the former elite. This paper argues that the reason why the elite may have to resort to full-scale democratization, despite its apparent costs to themselves, may be that lesser concessions would be viewed as a sign of weakness, spurring further unrest and more radical demands. The elite may therefore be forced to choose between repression and the most generous concession, a transition to full democracy.

Adam, Christopher S.

PD 2000. **TI** Aid Versus Trade Revisited. **AU** Adam, Christopher S.; O'Connell, Stephen A. **AA** Adam: CSAE, University of Oxford. O'Connell: Swarthmore University. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/19; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 31. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** F35, O41, O55. **KW** Foreign Aid. Trade Preferences. Africa.

AB This paper examines the (non) equivalence between aid flows and trade preferences as alternative forms of donor assistance in the presence of learning-by-doing externalities in recipient country export production. Using a two-period model based on van Wijnbergen (1985), in which the productivity externality constitutes the only (inter-temporal) distortion, we show that switching donor support on the margin from aid to trade preferences can increase recipient country welfare. To evaluate the size of this potential welfare gain to small African economies we simulate donor policy reforms using a dynamic CGE model where the productivity externality may also

interact with private capital accumulation. We show that for reasonable values of key behavioral parameters, the potential growth and welfare gains from a (donor) revenue neutral re-orientation of assistance to developing countries could be substantial. The paper concludes by considering why these potential dynamic gains appear to be unexploited by both donors and recipients.

Adams, Scott

TI Do Living Wage Ordinances Reduce Urban Poverty?
AU Neumark, David; Adams, Scott.

Adda, Jerome

PD November 1998. **TI** Mad Cows: Health Risk and Endogenous Discount Rates. **AA** University College London and INRA. **SR** University College London Discussion Papers in Economics: 99/02; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 30. **PR** 4 pounds or \$8.00. **JE** C33, D12, D18, E21, I12. **KW** Consumption. Discount Rates. Health Risk. Panel Data. Risk Aversion.

AB This paper shows that a model with rational consumers facing an endogenous discount rate is able to explain the consumption behavior of the Stench households during the "Mad Cow" crisis in March 1996. The paper circumvents traditional problems of selectivity biases when assessing the effect of risk on behavior by exploiting the suddenness of the crisis and by using a panel data set following consumers before and after the crisis. We show that the consumers' reactions were partly predictable and depended nonlinearly on the level of risk they had. Consumers with high risk tend to be fatalist. The model is able to reproduce the aggregate drop in consumption and to explain the heterogeneity at the micro level as well. We estimate the structural model at the micro level and identify the discount rate function, revealed by the behavior of the consumers. The estimated model is used to evaluate the welfare gains and the willingness to pay for a risk reduction.

Adedeji, Olumuyiwa S.

PD June 2001. **TI** The Size and Sustainability of Nigerian Current Account Deficits. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/87; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 30. **PR** \$10.00. **JE** F32, F41. **KW** Current Account Deficits. External Sustainability. Nigeria.

AB This paper uses an intertemporal model of the current account and macroeconomic indicators to examine the size and sustainability of Nigerian current account deficits over the 1960-97 period. The results indicate that the Nigerian economy appeared to satisfy its intertemporal budget constraint during this period. However there were years marked by excessive current account deficits. The results also support the view that current account deficits accompanied by macroeconomic instability and structural weaknesses can degenerate into an external crisis.

PD July 2001. **TI** Consumption-Based Interest Rate and the Present-Value Model of the Current Account -- Evidence from Nigeria. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/93; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 22. **PR** \$10.00.

JE F32, F41. **KW** Present-Value Model. Consumption-Based Interest Rate. Nigeria.

AB This paper presents a model of current account determination, based upon the permanent-income hypothesis. A present-value relationship among the current account, changes in net output, the exchange rate and the terms of trade is derived and the implications of such a relationship are tested using data for Nigeria during 1960-97.

Aghion, Philippe

PD September 2000. **TI** General Purpose Technology and Within-Group Wage Inequality. **AU** Aghion, Philippe; Howitt, Peter; Violante, Giovanni L. **AA** Aghion: University College London and Harvard University. Howitt: Ohio State University. Violante: University College London and CEPR.

SR University College London Discussion Papers in Economics: 2000/11; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 32. **PR** 4 pounds or \$8.00. **JE** E24, J24, J31, O32, O33. **KW** General Purpose Technology. History Dependence. Wage Inequality. Skill Transferability. Technological Change.

AB This paper develops a theoretical model to analyze how a General Purpose Technology (GPT) shapes within-group wage inequality when workers are ex-ante equal, but their productivity on the new technologies is subject to stochastic factors that are history dependent. It is argued that the diffusion of a GPT leverages the importance of these stochastic factors in three ways. First, the rise in the speed of embodied technical progress associated with the new GPT raises the market premium to workers adaptable to the leading-edge technology. Second, the generality of the technology raises the ability of adaptable workers to transfer recently acquired knowledge to new machines. Third, the generality of the technology reduces the cost of retooling old machines, thereby increasing the demand for adaptable workers. The key predictions of the model are shown to be in line with some of the existing empirical evidence; in particular, in the model the rise in within-group inequality is mainly transitory, and is mirrored by a rise in wage instability.

TI Deunionization, Technical Change and Inequality. **AU** Acemoglu, Daron; Aghion, Philippe; Violante, Giovanni L.

Aglietta, Michel

PD December 2001. **TI** Economic Consequences of Pension Reforms in Europe: An Investigation with the INGENUE World Model. **AU** Aglietta, Michel; Chateau, Jean; Fayolle, Jacky; Juillard, Michel; Le Cacheux, Jacques; Legarrec, Gilles; Touze, Vincent. **AA** Aglietta and Chateau: CEPII. Fayolle and Touze: OFCE (Observatoire Francais des Conjonctures Economiques). Juillard: CEPREMAP (Centre d'Etudes Prospectives d'Economie Mathematique Appliquees a la Planification). Le Cacheux: Universite de Pau et des Pays de l'Adour. Legarrec: Universite Paris I-Pantheon Sorbonne. **SR** CEPII Working Paper: 2001/17; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 37. **PR** no charge. **JE** F21, C68, D91, H55. **KW** CGEM. Demographics. International Capital Flows. Regional Integration.

AB This paper presents some results of the computable, general-equilibrium, multi-regional overlapping-generations

model INGENUE. The purpose of this research is to analyze the issues relating to wealth accumulation and alternative pension reforms in the context of global finance. Hence, it focuses on the international capital flows that ought to be induced by differential aging of the various regions of the world, as depicted by the UN demographic projections. The first section exhibits the stylized facts which suggest that a world equilibrium approach is appropriate and leads to an analysis of the convergence processes. The second section lays out the analytical structure of the world model and details our choices of calibrating. The third section presents a baseline scenario of the world economy in the 21st century. The final section analyzes European public pension reforms scenarios.

Aizenman, Joshua

PD October 1999. **TI** Uncertainty and the Disappearance of International Credit. **AU** Aizenman, Joshua; Marion, Nancy P. **AA** Aizenman: Dartmouth College and NBER. Marion: Dartmouth College. **SR** National Bureau of Economic Research Working Paper: 7389; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** \$5.00. **JE** E51, F21, F32, F34, F41. **KW** International Finance. Developing Countries. External Debt. Capital Markets. Credit.

AB We show that increased uncertainty about the size of an emerging market's external debt has a nonlinear and potentially large adverse effect on the supply of international credit offered to them. We also show that if international creditors are first-order risk averse, attaching greater weight to utility derived from bad outcomes than from good ones, a moderate increase in uncertainty about debt overhang -- or about other relevant factors affecting repayment prospects -- can cause the supply of credit to dry up completely. We therefore offer one possible explanation for why emerging markets may find themselves suddenly cut off from international capital markets.

PD October 1999. **TI** Capital Controls and Financial Crises. **AA** Dartmouth College and NBER. **SR** National Bureau of Economic Research Working Paper: 7398; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 18. **PR** \$5.00. **JE** E44, F21, F23, F31, F41. **KW** Developing Countries. Capital Markets. Foreign Direct Investment. Multinational Firms. Financial Crises.

AB The purpose of this paper is to explain the reluctance of developing countries to open up their capital market to foreigners, and the conditions inducing an emerging market economy to switch its policies. We consider an economy characterized initially by a one-sided openness to the capital market -- domestic agents can borrow internationally, but foreign agents cannot hold domestic equity. We identify conditions under which the emerging market's capitalists would oppose financial reform. This would be the case if "green field" investment by multinationals would bid up real wages, reducing thereby the rents of domestic capitalists. A financial crisis that raises the domestic interest rate and causes a real exchange rate depreciation may induce the emerging market's capitalists to support opening up the economy to FDI. This attitude switch is more likely to occur the greater the debt overhang, the lower the borrowing constraint, and the weaker the market power of foreign entrepreneurs. Even in these circumstances, the emerging market's capitalists would prefer a partial reform to a comprehensive one -- they would prefer to maintain the restrictions on "green field" FDI.

Al-Najjar, Nabil I.

PD November 1999. **TI** Reciprocity and the Costs of Authority Relationships. **AU** Al-Najjar, Nabil I.; Forman, Chris. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1281; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 41. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D82, J30, J41, J51, L20. **KW** Authority Relationships. Reciprocity. Principal-Agent. Organizational Form. Collective Action.

AB Authority relationships are viewed as reciprocal exchange in which a principal offers rents in return for subordinates' compliance with his authority. These rents induce compliance by creating a collective action problem among subordinates so they free-ride on each other in challenging the principal's authority. As a consequence of the payment of these rents, the cost of exercising authority may distort the principal's ex ante choice of internal authority relationship as an organizational form, relative to market exchange or formal, arms-length contracting.

Albano, Gian Luigi

PD 2000. **TI** A Bayesian Approach to the Econometrics of English Auctions. **AU** Albano, Gian Luigi; Jouneau-Sion, Frederic. **AA** Albano: University College London. Jouneau-Sion: Universite Catholique de Louvain and Universite de Lille 3. **SR** University College London Discussion Papers in Economics: 2000/15; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 11. **PR** 4 pounds or \$8.00. **JE** C11, C15, D44. **KW** English Auctions. Bayesian Inference. Gibbs Sampling. Auctions.

AB We propose a Bayesian approach to the econometrics of English auctions. The model formalizes the dynamic behavior of a sequence of prices in a repeated English auction. We apply the technique to an art auction and find that the sequence of selling prices displays a dynamic pattern.

PD June 2000. **TI** A Comparison of Standard Multi-Unit Auctions with Synergies. **AU** Albano, Gian Luigi; Germano, Fabrizio; Lovo, Stefano. **AA** Albano: University College London. Germano: Tel Aviv University. Lovo: HEC, Paris. **SR** University College London Discussion Papers in Economics: 2000/13; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 6. **PR** 4 pounds or \$8.00. **JE** D44. **KW** Multi-Unit Auctions. Synergies. Auctions.

AB In an example with two objects and four bidders, some of which have superadditive values, we characterize the equilibria of a simultaneous ascending auction and compare the revenue and efficiency generated with those generated by the sequential, the one-shot simultaneous, and the Vickrey-Clark-Groves auctions.

PD September 2000. **TI** Strategic Certification and Provision of Quality. **AU** Albano, Gian Luigi; Lizzeri, Alessandro. **AA** University College London and Princeton University. **SR** University College London Discussion Papers in Economics: 2000/10; Department of Economics,

University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 22. **PR** 4 pounds or \$8.00. **JE** C72, D82, L15. **KW** Information Revelation. Disclosure Rule. Certification. Asymmetric Information. Product Quality.

AB We study the effect of the presence of a certification intermediary in an environment where information asymmetries are particularly severe. The intermediary improves the information that buyers have about quality. This in turn increases the incentives that the seller has to provide high quality goods. Efficiency is increased by the presence of the intermediary but quality is underprovided in equilibrium relative to full information. The intermediary can implement the optimal policy in many ways. The amount of information revealed ranges from full disclosure to partial, noisy disclosure.

PD September 2000. **TI** A Class of All-Pay Auctions with Affiliated Information. **AA** University College London. **SR** University College London Discussion Papers in Economics: 2000/14; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 6. **PR** 4 pounds or \$8.00. **JE** D44, D82. **KW** All-Pay Auctions. War of Attrition. Affiliated Values. Auctions. Information.

AB We study an auction mechanism combining the war of attrition and the all-pay auction under the assumption that buyers' signals are affiliated. We provide a sufficient condition which guarantees the existence of a symmetric, increasing equilibrium bidding strategy, but rules out full extraction of buyers' surplus by the seller. We develop revenue comparison between the combined mechanism, the war of attrition and the all-pay auction.

Alberini, Anna

PD March 1999. **TI** Accidents Waiting to Happen: Liability Policy and Toxic Pollution Releases. **AU** Alberini, Anna; Austin, David. **AA** Alberini: University of Colorado, Boulder. Austin: Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/29; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 27. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** C33, K32, Q25, Q28. **KW** Strict Liability. Toxic Spills. Policy Endogeneity. Hazardous Waste. Environmental Policy.

AB Proponents of environmental policies based on liability assert that strict liability imposed on the polluter will induce firms to handle hazardous wastes properly and to avoid disposing them into the environment. Economic theory and a few well-publicized cases, however, suggest that a number of factors may dilute the incentives posed by strict liability. In this paper, the authors run regressions relating unintended releases of pollution into the environment (aggregated at the state level, and followed over nine years from 1987 to 1995) to the imposition of strict liability on the polluter, exploiting variation across states in the liability provisions of their mini-Superfund laws, and in the years these were adopted. The authors experiment with instrumental variable estimation, fixed effects, and endogenous switching, and find that only after they explicitly model the endogeneity of states' liability laws is strict liability seen as reducing the seriousness of spills and releases. They also find evidence consistent with the notion that under strict liability, firms may spin off into, or delegate riskier production processes to, smaller firms, which are partially sheltered from liability. This tendency appears to be

widespread.

TI Mortality Risk Valuation for Environmental Policy. **AU** Krupnick, Alan; Alberini, Anna; Cropper, Maureen; Simon, Nathalie.

Alesina, Alberto F.

PD October 1999. **TI** Redistribution Through Public Employment: The Case of Italy. **AU** Alesina, Alberto F.; Danninger, Stephen; Rostagno, Massimo V. **AA** Alesina: Harvard University and NBER. Danninger: Columbia University. Rostagno: European Central Bank. **SR** National Bureau of Economic Research Working Paper: 7387; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** H23, J24, J38, J64, R23. **KW** Public Employment. Subsidies. Wages. Regional Labor Markets. Human Capital.

AB This paper examines the regional distribution of public employment in Italy. It documents two sets of facts. The first is the use of public employment as a subsidy from the North to the less wealthy South. We calculate that about half of the wage bill in the South of Italy can be identified as a subsidy. Both the size of public employment and the level of wages are used as redistributive devices. The second set of facts concerns the effects of a subsidized public employment on individuals' attitudes toward job search, education, "risk taking" activities etc. Public employment discourages the development of market activities in the South.

PD October 1999. **TI** Fiscal Policy, Profits and Investment. **AU** Alesina, Alberto F.; Perotti, Roberto; Schiantarelli, Fabio; Ardagna, Silvia. **AA** Alesina: Harvard University. Perotti: Columbia University. Schiantarelli and Ardagna: Boston College. **SR** Centre for Economic Policy Research Discussion Paper: 2250; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 56. **PR** 5 pounds, \$8 or 8 euros. **JE** E62, H32. **KW** Fiscal Policy. Investment. Profits. Taxes.

AB This paper evaluates the effects of fiscal policy on investment using a panel of OECD countries by investigating how different types of fiscal policy affect profits and, as a result, investment. A sizeable negative effect of public spending -- and in particular of its public wage component -- on business investment is found. This result is consistent with models in which government employment creates wage pressure for the private sector. Various types of taxes also have negative effects on profits, but, interestingly, the effects of government spending on investment are larger than the effect of taxes. The results have important implications for the so-called "non-Keynesian" (i.e. expansionary) effects of fiscal adjustments.

Allais, Olivier

PD December 2000. **TI** Consumption Habit and Equity Premium in the G7 Countries. **AU** Allais, Olivier; Cadiou, Loic; Dees, Stephane. **AA** Allais: University of Paris I Pantheon-Sorbonne. Cadiou and Dees: CEPII. **SR** CEPII Working Paper: 2000/19; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 28. **PR** no charge. **JE** C13, E21, E44, G12. **KW** Consumption. Habit Formation. Equity Premium. Generalized Method of Moments.

AB The consumption capital asset pricing model (C-CAPM)

fails to explain the observed equity premia apart from considering implausible values of the risk aversion coefficient. This equity premium puzzle has been attributed in particular to the time-separability of the consumers' preferences. This paper investigates empirically the ability of the C-CAPM to solve this puzzle once assumed that consumption behavior presents habit formation. From the estimation of the model's parameters for the G7 countries, we show that the consumption model with habit formation is able to account for financial asset returns with more reasonable preference.

PD February 2001. **TI** Defining Consumption Behavior in a Multi-Country Model. **AU** Allais, Olivier; Cadiou, Loic; Dees, Stephane. **AA** Allais: University of Paris I Pantheon-Sorbonne. Cadiou and Dees: CEPII. **SR** CEPII Working Paper: 2001/02; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 23. **PR** no charge. **JE** C33, C51, E21, E44. **KW** Consumption. Habit Formation. Liquidity Constraints. GARCH.

AB This paper presents the consumption function of Marmotte, the multi-country model of CEPII-CEPREMAP, and its estimation for the 17 countries of the model. The consumption function is based on the permanent income model. We have extended this model to account for the presence of habit formation and liquidity constraints in the consumption behaviors. The results obtained give us reasonable values for the consumption function of Marmotte. Differences across the 17 countries concern only the habit behaviors. However, these differences are not large enough to imply significant differences in terms of consumption responses to shocks in the simulations of the model.

Altissimo, Filippo

PD January 2000. **TI** The Nonlinear Dynamics of Output and Unemployment in the U.S. **AU** Altissimo, Filippo; Violante, Giovanni L. **AA** Altissimo: Bank of Italy. Violante: University College London and CEPR. **SR** University College London Discussion Papers in Economics: 2000/07; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 32. **PR** 4 pounds or \$8.00. **JE** C32, E24, E32. **KW** Threshold VAR. Ergodicity. Impulse Response Functions. Persistence. Recessions.

AB This paper studies the joint dynamics of U.S. output and unemployment rate in a nonlinear VAR model. The nonlinearity is introduced through a feedback variable that endogenously augments the output lags of the VAR in recessionary phases. Sufficient conditions for the ergodicity of the model, potentially applying to a larger class of threshold models, are provided. The linear specification is severely rejected in favor of our threshold VAR. However, in the estimation the feedback is found to be statistically significant only on unemployment, while it transmits to output through its cross-correlation. This feedback effect from recessions generates important asymmetries in the propagation of shocks, a possible key to interpret the divergence in the measures of persistence existing in the literature. The regime-dependent persistence also explains the finding that the feedback from recession exerts a positive effect on the long-run growth rate of the economy, an empirical validation for the Schumpeterian macroeconomic theories.

Anand, Bharat N.

PD July 2001. **TI** Investment Banking and Security Market Development: Does Finance Follow Industry? **AU** Anand, Bharat N.; Galetovic, Alexander. **AA** Anand: Harvard Business School. Galetovic: University of Chile. **SR** International Monetary Fund Working Paper: WP/01/90; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 18. **PR** \$10.00. **JE** G20, L22. **KW** Relationships. Investment Banks.

AB Long-term relationships between business firms and investment banks are pervasive in developed security markets and there is evidence that better monitoring and information result from these relationships. Therefore, security markets should allocate resources better when an investment banking industry exists. We study the necessary conditions for the emergence of sustainable relationships and explore whether policy can foster them. We show that policy can help alleviate the cost of relationships, but an investment banking industry will not emerge with only a small number of large firms.

Anderson, Heather M.

PD March 2000. **TI** Predicting the Probability of a Recession with Nonlinear Autoregressive Leading Indicator Models. **AU** Anderson, Heather M.; Vahid, Farshid. **AA** Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Paper: 00/03; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/. **PG** 29. **PR** no charge. **JE** C22, C23, E17, E37. **KW** Event Probabilities. Leading Indicators. Nonlinear Models.

AB We develop nonlinear leading indicator models for GDP growth, with the interest rate spread and growth in M2 as leading indicators. Since policy makers are typically interested in whether or not a recession is imminent, we evaluate these models according to their ability to predict the probability of a recession. Using data for the United States, we find that conditional on the spread, the marginal contribution of M2 growth in predicting recessions is negligible.

PD May 2001. **TI** Market Architecture and Nonlinear Dynamics of Australian Stock and Futures Indices. **AU** Anderson, Heather M.; Vahid, Farshid. **AA** Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Paper: 01/03; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/. **PG** 35. **PR** no charge. **JE** C22, C23, E17, E37. **KW** Arbitrage. Electronic Trading. Mean Reversion. Nonlinear Error Correction. Smooth Transition Models. Thresholds. Transaction Costs.

AB This paper studies the All Ordinaries Index in Australia, and its futures contract known as the Share Price Index. We use a new form of smooth transition model to account for a variety of nonlinearities caused by transaction costs and other market/data imperfections, and given the recent interest in the effects of market automation on price discovery, we focus on how the nonlinear properties of the basis and returns have changed, now that floor trading in futures contract has been replaced by electronic trading.

Anderson, J. W.

PD April 2000. **TI** The Surge in Oil Prices: Anatomy of a Non-Crisis. **AA** Resources for the Future. **SR** Resources

for the Future Discussion Paper: 00/17; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 7. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D43, L13, L71, L90, N55. **KW** Oligopoly. OPEC. Hydrocarbon Fuels. Oil Prices.

AB Last winter was the fourth time in 30 years that oil prices had suddenly, without warning, shot upward. The sudden price spike was caused by two miscalculations by OPEC. OPEC expanded production just as East Asia was going into a recession; however, OPEC and most observers underestimated its severity. That produced a glut of oil, which forced prices down, in early 1999. Then, to correct that glut, OPEC cut production in late 1999 just as East Asia was coming out of the recession much faster than expected. With demand rising and production falling, prices shot up. The point is not that Saudi Arabia, the dominant force in OPEC, should have been smarter. The point is that a lot of genuinely unpredictable things happen in the world, and the markets for commodities like oil are inherently unstable. This recent experience demonstrates that this kind of shock can occur in peaceful times, in the absence of any unusual political tension. This paper addresses the development and course of the current crisis as well as the questions, What to do about high oil prices? and Where are we headed now ?.

Anderson, John

PD May 1999. **TI** The Rationale for Flexibility in the Design of Greenhouse Gas Abatement Policies: A Review of Economic Issues. **AU** Anderson, John; Morgenstern, Richard D.; Toman, Michael A. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/38; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 33. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** L51, Q25, Q28. **KW** Climate Change. Kyoto Protocol. Greenhouse Gases. Air Pollution. Environmental Policy.

AB This paper focuses on the economic desirability of the fixed and relatively short-term greenhouse gas targets and timetables in the Kyoto Protocol. The Protocol provides flexibility in which greenhouse gases to control, where control can be implemented, and what domestic policy measures are used. However, the Protocol does not allow much flexibility in when emission reductions take place in pursuit of longer-term environmental goals. Nor does it allow more flexible shorter-term environmental targets through price-based policy instruments that balance environmental goals and compliance costs. The relative inflexibility of the Protocol with respect to these elements may derive, in part, from a misplaced analogy between the global warming issue and the highly successful effort to phase out CFCs under the Montreal Protocol. The lack of "when" flexibility may be a key barrier to achieving the broader goals of the Kyoto Protocol, particularly if "where" flexibility is constrained in implementing the Protocol.

Ando, Amy

TI The Enhanced I/M Program in Arizona: Costs, Effectiveness, and a Comparison with Pre-Regulatory Estimates. **AU** Harrington, Winston; McConnell, Virginia D.; Ando, Amy.

PD October 1999. **TI** Costs, Emissions Reductions, and Vehicle Repair: Evidence from Arizona. **AU** Ando, Amy; McConnell, Virginia D.; Harrington, Winston.

AA Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/23R; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 22. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** Q25, R48. **KW** Repair. Vehicle Emissions. Mobile Sources. Air Pollution.

AB The Arizona inspection and maintenance (I/M) program provides an opportunity to examine the cost-effectiveness of vehicle emissions repair. We consider data from more than 80,000 vehicles that failed the Arizona test, and because of missing or incomplete cost information, we develop a method for estimating the costs of repair when costs are not reported. We find surprising evidence that almost a quarter of all vehicles that take the test are never observed to pass the test. Using statistical analysis, we find that older, more polluting vehicles are much more likely not to pass the test, and their expected costs of repair are much higher than for new cars. We then examine the potential for more cost-effective repair, first through an analysis of tightening the I/M cutpoints, and then by calculating the cost savings of achieving different emissions reduction goals when the most cost-effective repairs are made first.

Andrews, Donald W. K.

PD January 2001. **TI** Higher-Order Improvements of a Computationally Attractive k-step Bootstrap for Extremum Estimators. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1230R; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. **PG** 64.

PR no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** C12, C13, C15. **KW** Bootstrapping. Edgeworth Expansion. Extremum Estimators. K-Step Bootstrap. Newton-Raphson.

AB This paper establishes the higher-order equivalence of the k-step bootstrap, introduced recently by Davidson and MacKinnon (1999a), and the standard bootstrap. The k-step bootstrap is a very attractive alternative computationally to the standard bootstrap for statistics based on nonlinear extremum estimators, such as generalized method of moment and maximum likelihood estimators. The paper also extends results of Hall and Horowitz (1996) to provide new results regarding the higher-order improvements of the standard bootstrap and the k-step bootstrap for extremum estimators (compared to procedures based on first-order asymptotics). The results of the paper apply to Newton-Raphson (NR), default NR, line-search NR, and Gauss-Newton k-step bootstrap procedures. The results apply to the non-parametric iid bootstrap, non-overlapping and overlapping block bootstraps, and restricted and unrestricted parametric bootstraps. The results cover symmetric and equal-tailed two-sided t tests and confidence intervals, one-sided t tests and confidence intervals, Wald tests and confidence regions, and J tests of over-identifying restrictions.

PD January 2001. **TI** Local Polynomial Whittle Estimation of Long-Range Dependence. **AU** Andrews, Donald W. K.; Sun, Yixiao. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1293; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. **PG** 36. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** C13, C14, C22. **KW** Asymptotic Bias. Bias Reduction. Long Memory. Optimal Bandwidth. Whittle

Likelihood.

AB The local Whittle (or Gaussian semiparametric) estimator of long range dependence, proposed by Kunsch (1987) and analyzed by Robinson (1995a), has a relatively slow rate of convergence and a finite sample bias that can be large. This paper generalizes the local Whittle estimator to circumvent these problems. Instead of approximating the short-run component of the spectrum by a constant in a shrinking neighborhood of frequency zero, the authors approximate its logarithm by a polynomial. This leads to a "local polynomial Whittle" (LPW) estimator. Following the work of Robinson (1995a), the authors establish the asymptotic bias, variance, mean-squared error (MSE), and normality of the LPW estimator. They determine the asymptotically MSE-optimal bandwidth, and specify a plug-in selection method for its practical implementation. When the short-run component of the spectrum is smooth enough near the origin, the authors find that the bias of the LPW estimator goes to zero at a faster rate than that of the local Whittle estimator, and its variance is only inflated by a multiplicative constant. In consequence, the rate of convergence of the LPW estimator is faster than that of the local Whittle estimator, given an appropriate choice of the bandwidth.

Appleton, Simon

PD 1999. **TI** Changes in Poverty in Uganda, 1992-1997. **AU** Appleton, Simon; Emwanu, Tom; Kagugube, Johnson; Muwonge, James. **AA** Appleton: CSAE, University of Oxford. Emwanu, Kagugube and Muwonge: Ugandan Ministry of Finance and Economic Development. **SR** Centre for the Study of African Economies Working Paper: WPS/1999/22; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 44. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** I31, I32. **KW** Uganda. Poverty Line.

AB Analysis of five nationally representative household surveys from Uganda show a fall in poverty from 1992-1997. Using an absolute poverty line calculated following Ravallion and Bidani, we find 56% of Ugandans were poor in 1992 falling to 44% in 1997/8. The conclusion that poverty fell is robust to the choice of poverty measure and poverty line. General growth accounts for most of the fall in poverty, although there was also an improvement in the progressivity of the distribution. Up to 1995/96, half of the fall in poverty was attributable to coffee-growing households. Poverty increased in households with non-working heads.

Arcand, Jean-Louis

PD 2000. **TI** Ethnicity, Communication and Growth. **AU** Arcand, Jean-Louis; Guillaumont, Patrick; Guillaumont Jeanneney, Sylviane. **AA** Arcand: CERDI-CNRS, Université d'Auvergne and CRDE, Université de Montreal. Guillaumont and Guillaumont Jeanneney: CERDI-CNRS, Université d'Auvergne. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/20; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 17. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** J15, J18, O15, O57. **KW** Ethnic Diversity. Ethnic Polarization. Communication Costs.

AB In this paper we consider the link often alleged between ethnic diversity and the growth rate of GDP per capita. We first

assume that it is ethnic polarization rather than ethnic fragmentation that is harmful for growth so that the relationship may be non-linear. Second, we hypothesize that the impact of ethnic diversity on growth may depend on communication costs. This leads us to estimate a traditional growth rate equation on cross sectional data in a switching regression framework. In "low communication costs countries", the relationship between growth and ethnic diversity is U-shaped. On the other hand, in "high communication costs countries", growth is a decreasing function of ethnic diversity and the severity of the latter's deleterious impact is an increasing function of communication costs, proxied here by the illiteracy rate. The regime that a country belongs to is a function of two proxies for communication costs: the illiteracy rate and population density. The impact of ethnic diversity on growth seems not to operate through macroeconomic policy choices. Rather it is a direct transmission mechanism, in which ethnic diversity affects private and public resource allocation, that appears to dominate.

Aron, Janine

PD 2000. **TI** Personal and Corporate Saving in South Africa. **AU** Aron, Janine; Muelbauer, John. **AA** Aron: CSAE, University of Oxford. Muelbauer: Nuffield College, Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/21; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 37. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** E21, H24, H25. **KW** South Africa. Savings.

AB Low domestic savings rates in South Africa run the risk of perpetuating a low growth trap. The decline in government saving, a major reason for the overall decline, is now being reversed. However, personal sector saving rates have fallen since 1993, and corporate rates since 1995, and both may decline further with lower real interest rates. It is important to understand their behavior in order to formulate policy to raise the domestic saving rate in line with growth needs. This paper summarizes our work on the household sector, emphasizing the role of financial liberalization, assets and income expectations, and it explains sectoral linkages and policy implications. Models are developed both for the share of profits in national income, including roles for the terms of trade, tax effects and the price/unit labor cost margin; and for the share of corporate saving in profits, which we find depends on inflation, the real interest rate, dividend taxation and financial liberalization.

PD 2000. **TI** Financial Liberalisation, Consumption and Debt in South Africa. **AU** Aron, Janine; Muelbauer, John. **AA** Aron: CSAE, University of Oxford. Muelbauer: Nuffield College, Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/22; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 38. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** C51, D12, E21, E44, E51. **KW** Consumption. Household Debt. Financial Liberalization. South Africa.

AB South Africa experienced substantial rises in the ratios of consumption and household debt to income from 1983, for which conventional explanations in terms of income, income expectations, interest rates and wealth prove inadequate. We emphasize the role of financial liberalization, and clarify its multi-faceted effects on consumption. Our methodological innovation is to treat financial liberalization as an

unobservable, proxied by a spline function, and entering both consumption and debt equations, which are jointly estimated. The comprehensive solved-out consumption function uses our own constructed set of personal wealth estimates at market value and income forecasts from a forecasting equation. The empirical results corroborate the theory in the paper, confirming the importance for consumer spending of extensive financial liberalization, of fluctuations in a range of asset values and asset accumulation, and of income expectations. Results suggest that households largely pierce the corporate veil. The paper also throws light on the monetary policy transmission mechanism.

PD 2000. **TI** Inflation and Output Forecasts for South Africa: Monetary Transmission Implications. **AU** Aron, Janine; Muelbauer, John. **AA** Aron: CSAE, University of Oxford. Muelbauer: Nuffield College, Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/23; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 32. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** C53, E31. **KW** Inflation. Multi-Step Forecast. Output Growth.

AB Multi-step forecasts with stochastic trends are used to predict inflation and output growth in South Africa, one year ahead. The inflation model has an equilibrium correction form. Factors reducing the forward inflation rate include increased openness, low wholesale prices relative to consumer prices, a high real exchange rate, low real mortgage payments and real interest rates, and a low output gap and indirect tax rate. The output model has important negative interest rate effects, which are altered by monetary policy regime changes. Trade and government surpluses to GDP, and improved terms-of-trade, all affect future output positively.

PD 1999. **TI** Reflections on the South African Rand Crisis of 1996 and Policy Consequences. **AU** Aron, Janine; Elbadawi, Ibrahim. **AA** Aron: CSAE, University of Oxford. Elbadawi: World Bank. **SR** Centre for the Study of African Economies Working Paper: WPS/1999/13; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 27. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** C51, F31. **KW** Currency Crisis. South Africa. Speculative Attack. Exchange Control. Capital Flows.

AB After South Africa's democratic elections in 1994, large capital inflows were induced by the cessation of trade and financial sanctions, improved creditworthiness and a liberalized capital account for foreigners. The flows were managed in a classic trade-off between currency stability, and raised interest rates to counter inflation from a credit boom and partially sterilized intervention. In early 1996, the currency suffered a speculative attack. Using a theoretical model of currency crises, we present empirical results suggesting the importance of economic fundamentals and policy credibility as determinants of investors' devaluation expectations prior to the crisis. Poor growth associated with subsequent protracted currency volatility and high interest rates argues for a range of complementary policies to manage inflows in South Africa. These include reserve requirements on certain inflows, prudent further liberalization of domestic exchange controls, improved private and government savings policies, a medium-term public debt framework and closer monitoring of risk management by banking and other financial institutions.

TI Estimates of Personal Sector Wealth for South Africa.
AU Muelbauer, John; Aron, Janine.

Arora, Ashish

TI Enter at Your Own Risk: HMO Participation and Enrollment in the Medicare Risk Market. **AU** Abraham, Jean; Arora, Ashish; Gaynor, Martin; Wholey, Douglas.

Arozamena, Leandro

PD August 2000. **TI** Investment Incentives in Procurement Auctions. **AU** Arozamena, Leandro; Cantillon, Estelle. **AA** Arozamena: University of San Andres. Cantillon: Yale University and Harvard Business School. **SR** Yale Cowles Foundation Discussion Paper: 1276; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. **PG** 41. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** C70, D21, D44, H57, L10. **KW** Asymmetric Auctions. Endogenous Distributions. Investment Incentives. Procurement. Cost Reduction.

AB We investigate firms' incentives for cost reduction in the first price sealed bid auction, a format largely used for procurement. A central feature of the model is that we allow firms to be heterogeneous. Though private value first price auctions are not games with monotonic best responses, we find that for comparative statics purposes they behave like these games. In particular, firms will tend to underinvest in cost reduction because they anticipate fiercer head-on competition. Using the second price auction as a benchmark, we also find that the first price auction will elicit less investment from market participants. Moreover, both auction formats tend to favor investment by the current market leader and are therefore likely to reinforce asymmetries among market participants.

Artis, Michael J.

PD September 1999. **TI** The European Business Cycle. **AU** Artis, Michael J.; Krolzig, Hans-Martin; Toro, Juan. **AA** Artis and Toro: European University Institute. Krolzig: University of Oxford. **SR** Centre for Economic Policy Research Discussion Paper: 2242; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** C32, E32, F43, F47. **KW** Business Cycles. European Union. Markov Switching Structural Breaks. Time Series Analysis.

AB It has recently been argued that the formation of a monetary union creates in itself a tendency for business cycle symmetry to emerge. If this holds for the European Monetary System, then an emergent "European cycle" will become more dominant in future years. Univariate Markov switching autoregressions (MS-AR) are used for individual countries in order to detect changes in the mean growth rate of industrial production. The smoothed probabilities obtained from these models give support to the possibility of inferring a common European cycle by jointly modelling the industrial production indices of the nine countries under study. An MS-VAR model is then used to identify the common cycle in Europe, dated on the basis of the regime probabilities. Two further issues investigated are: first, the contribution of the European Business Cycle to the individual country cycles; second, an impulse response analysis investigating the response of each individual country to European expansions and recessions. The paper analyzes the response of industrial production in each country due to a change in regime, focusing mainly on two

types of shocks: the response of industrial production in individual countries due to a European recession; and the effect of an expansionary period in Europe.

Auerbach, Alan J.

PD February 2000. **TI** Capital Gains Realizations of the Rich and Sophisticated. **AU** Auerbach, Alan J.; Siegel, Jonathan M. **AA** Auerbach: University of California, Berkeley and National Bureau of Economic Research. Siegel: University of California, Berkeley. **SR** National Bureau of Economic Research Working Paper: 7532; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 11. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside US). **JE** G11, H31. **KW** Capital Gains. Tax Avoidance.

AB This paper attempts to bring theoretical and empirical research on capital gains realization behavior closer together by considering whether investors who appear to engage more in strategic tax avoidance activity also respond differently to tax rates. We find that such investors exhibit significantly smaller responses to permanent tax rate change than other investors. Put another way, a larger part of their response to capital gains tax rates reflects timing, consistent with their closer adherence to tax avoidance strategies emphasizing arbitrage based on tax rate differentials. This finding holds for two alternative specifications of realization behavior, one of which suggests larger permanent responses to capital gains tax rates than those of previous panel studies.

Auriol, Emmanuelle

PD November 1999. **TI** On the Optimal Number of Representatives. **AU** Auriol, Emmanuelle; Gary-Bobo, Robert J. **AA** Auriol: Universite de Toulouse. Gary-Bobo: Universite de Cergy-Pontoise. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1286; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 33. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D71, D72, D82, H41. **KW** Public Decision-Making. Public Goods. Revelation Mechanisms. Principal-Agent. Social Choice.

AB We study a model of public decision-making in simple public goods economies with moral hazard and adverse selection. Economic agents must invest resources (or provide effort) to discover their own preferences. We consider direct revelation mechanisms based on sampling. A sample of agents is drawn in the population, and each member of the sample reports a preference type to a Principal. The determinants of the "representative sample" size are studied. The structure and magnitude of effort and sampling costs affects the optimal number of representatives. If the net social value of effort is high, first and second best optimality require a maximal sample (or "direct democracy"). If, on the contrary, effort is too costly, the recourse to samples ("representative democracy") is justified as a second best. To obtain the results, we not only take effort and revelation incentives into account, but also restrict decision rules to satisfy an additional property of robustness to opportunistic manipulation by the Principal, which forbids the use of a priori knowledge in public decision procedures.

PD November 1999. **TI** Teamwork Management in an

Era of Diminishing Commitment. **AU** Auriol, Emmanuelle; Friebel, Guido; Pechlivanos, Lambros. **AA** Auriol and Pechlivanos: Institut D'Economie Industrielle. Universite des Sciences Sociales de Toulouse. Friebel: Stockholm School of Economics, IDEI, Toulouse, SITE, RECEP, CEPR and WDI. **SR** Centre for Economic Policy Research Discussion Paper: 2281; CEPR, 90- 98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 32. **PR** 5 pounds, \$8 or 8 euros. **JE** D23, J33, M12. **KW** Teamwork. Commitment. Team Size. Collective Orientation of Incentive Schemes. Career Concerns. Sabotage.

AB This paper studies management when the principal has different degrees of commitment power. In a model in which both the principal and agents are symmetrically uncertain about the agents' innate abilities, implicit incentives arise when the principal is not able to commit herself to long-term contracts. The presence of implicit incentives makes the agents more reluctant to behave cooperatively (they actually have incentives to "sabotage" their colleagues). This forces the principal to offer more "collectively oriented" incentive schemes than in the presence of commitment, in order to induce the desired level of cooperation. Moreover, teamwork exposes agents to higher risks than the ones they are exposed to in a Taylorist workplace, thus finding that the optimal team size is constrained by risk considerations, and is decreasing in the uncertainty of the production technology and in the time horizon of the team.

Austin, David

PD March 2000. **TI** Estimating Future Consumer Welfare Gains from Innovation: The Case of Digital Data Storage. **AU** Austin, David; Macauley, Molly K. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/13; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 30. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D60, H43, O32. **KW** Quality Adjusted. Cost Index. Consumer Surplus. Innovation. Research and Development.

AB We develop a quality-adjusted cost index to estimate expected returns to investments in new technologies. The index addresses the problem of measuring social benefits from innovations in service sector inputs, where real output is not directly observable. We forecast welfare gains from two U.S. Advanced Technology Program innovations equaling 25%-50% of expected price, and aggregate consumer benefits of \$1-\$2 billion, relative to trends in existing technologies. Our model's probabilistic parameters reflect uncertainty about prospective outcomes and in our hedonic estimates of shadow values for selected product attributes. The index can be readily adopted by research and development (R&D) managers in industry and government.

TI The Chesapeake Bay and the Control of Nox Emissions: A Policy Analysis. **AU** Krupnick, Alan; McConnell, Virginia D.; Austin, David; Cannon, Matt; Stoessell, Terrell; Morton, Brian.

PD October 1998. **TI** The Benefits of Air Pollutant Emissions Reductions in Maryland: Results from the Maryland Externalities Screening and Valuation Model. **AU** Austin, David; Krupnick, Alan; Burtraw, Dallas; Stoessell, Terrell. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/05; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 32. **PR** Foreign: \$15.00

Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** I18, Q24, Q25, Q26, Q49. **KW** Integrated Assessment. Health. Environmental Benefits. Valuation. Uncertainty.

AB We developed an integrated-assessment model for the Maryland Department of Natural Resources that seeks to account for "damage pathways" between electricity generation and effects on the environment and human health. The Maryland Externalities Screening and Valuation Model accounts for all environmental pathways, so future parameter estimates can be inserted as they are developed. This model is also designed to estimate and report the uncertainties in measuring and valuing environmental and human health effects. When we use the model to estimate the benefits from emissions reductions called for by Title IV of the 1990 amendments to the Clean Air Act, we find that health benefits will be about \$0.7 billion in 2010; recreational visibility benefits will be approximately \$21 million, and residential visibility benefits about \$1.2 million. The model thus helps reveal the potential of emissions reduction policies to achieve specific environmental and human health goals.

TI Accidents Waiting to Happen: Liability Policy and Toxic Pollution Releases. **AU** Alberini, Anna; Austin, David.

Ayalew, Daniel

PD 2000. **TI** Demobilisation, Land and Household Livelihoods: Lessons from Ethiopia. **AU** Ayalew, Daniel; Dercon, Stefan; Krishnan, Pramila. **AA** Ayalew: Addis Ababa University. Dercon: Katholieke Universiteit, Leuven and CSAE, University of Oxford. Krishnan: CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/25; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csaee.ox.ac.uk/. **PG** 19. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** I38, O12, Q12. **KW** Demobilization. War. Ethiopia. Poverty.

AB This paper discusses the welfare impact of the demobilization of half a million soldiers in 1991 in Ethiopia. Using micro-level data, it is found that the demobilization and reintegration programs achieved some success. Ex-soldiers returning to their rural communities did not, by and large, face major problems in gaining access to land. State ownership of land facilitated the reintegration process. However, lack of a land market does pose problems, and tensions over land may increase. Ex-soldiers have below average holdings of livestock (a key asset for rural livelihoods) reflecting difficulties in livestock provision in the reintegration program. Moreover, ex-soldiers who entered the urban economy encountered a tough labor market and many became unemployed. In summary, young people have few livelihood opportunities in either rural or urban Ethiopia, a situation that must be remedied if social conflict is to be avoided and poverty reduced.

Azam, Jean-Paul

PD January 2001. **TI** Domestic Competition and Export Performance of Manufacturing Firms in Cote d'Ivoire. **AU** Azam, Jean-Paul; Calmette, Marie-Francoise; Loustalan, Catherine; Maurel, Christine. **AA** Azam: ARQADE, University of Toulouse and Institut Universitaire de France. Calmette: IDEI. Loustalan and Maurel: Institut Universitaire de France. **SR** Centre for the Study of African Economies Working Paper: WPS/2001/01; CSAE Publishing, Institute of

Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 18. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** F12, L11, L13, R41. **KW** Cote d'Ivoire. Transportation Costs. Manufacturing Competition.

AB Because of transportation costs, African manufacturing firms benefit from some market power on their domestic market, where they can charge a higher price than the export price, net of transportation cost. We present a simple theoretical model of an exporting firm that discriminates between the export and the domestic markets, where firms engage in Cournot competition. It is then shown that the impact of increased competition on export performance by the firms is ambiguous, and may be negative for a non trivial range of parameter values. Using survey data on Ivoirian firms, our empirical analysis gives some support to this prediction, showing that the probability of a firm exporting decreases with increased competition.

PD January 2001. **TI** Inflation and Macroeconomic Instability in Madagascar. **AA** ARQADE, University of Toulouse and Institut Universitaire de France. **SR** Centre for the Study of African Economies Working Paper: WPS/2001/02; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 21. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** E31, E32. **KW** Madagascar. Macroeconomic Instability. Inflation.

AB The relationships between inflation and macro-economic instability are discussed analytically, using a simple monetary model with rational expectations, with an application to the case of Madagascar. The recent macroeconomic history of this country suggests that high inflation is correlated with high volatility of the inflation rate and the real effective exchange rate. The relevance of this observation is confirmed by an empirical analysis of the relationships between inflation, competitiveness and instability in Madagascar.

PD January 2001. **TI** The Redistributive State and Conflicts in Africa. **AA** ARQADE, University of Toulouse and Institut Universitaire de France. **SR** Centre for the Study of African Economies Working Paper: WPS/2001/03; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 17. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** D31, D33, H11, H23, H42. **KW** Political Violence. Ethnic Conflict. Distribution Conflict.

AB This paper argues that ethnic problems are only one aspect of political violence in Africa, while violent conflicts must be thought about as a failure of the state to perform some of its fundamental tasks. State formation in Africa is a transition process starting from an institutional endowment of ethnic division. Ethnic capital in Africa ensures the provision of many services that a modern state has taken over in rich countries, including security, education, rules of behavior, etc. Most African states are so far unable to deliver all these services adequately, and must go through an initial phase of federation of ethnic groups, before they can provide a credible substitute to ethnic capital. The system of redistribution within and among groups is the key to creating the solidarity links between them, and its breakdown is liable to trigger the eruption of political violence. Civil wars, or other forms of political violence, are thus an integral part of the political economy of Africa.

Aznar, Juana

TI Sustainable Growth and Environmental Policies. **AU** Rubio, Santiago J.; Aznar, Juana.

Babcock, Bruce A.

TI Relative Efficiency of Sequestering Carbon in Agricultural Soils Through Second Best Instruments. **AU** Pautsch, Gregory R.; Babcock, Bruce A.

Bag, Parimal Kanti

PD October 1998. **TI** More on Phantom Bidding. **AU** Bag, Parimal Kanti; Dinlersoz, Emin Murat; Wang, Ruqu. **AA** Bag: University of Liverpool. Dinlersoz: University of Rochester. Wang: Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 976; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html. **PG** 6. **PR** Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. **JE** D44, D61. **KW** English Auction. Phantom Bidding. Fixed Reserve Price. Flexible Reserve Price.

AB A phantom bidding model is analyzed for a sale auction. The following questions are addressed: the effects of phantom bidding on overall social welfare and buyers' profits. It is shown that social welfare may increase or decrease as the auctioneer switches from the fixed reserve price policy to phantom bidding. The buyers' profits will increase whenever social welfare increases.

Baker, Michael

PD September 1999. **TI** Earnings Dynamics and Inequality Among Canadian Men, 1976-1992: Evidence from Longitudinal Income Tax Records. **AU** Baker, Michael; Solon, Gary. **AA** Baker: University of Toronto and NBER. Solon: University of Michigan. **SR** National Bureau of Economic Research Working Paper: 7370; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 41. **PR** \$5.00. **JE** C23, D31, J31. **KW** Income Distribution. Wages. Earnings Inequality. Panel Data.

AB Several recent studies have found that earnings inequality in Canada has grown considerably since the late 1970's. Using an extraordinary data base drawn from longitudinal income tax records, we decompose this growth in earnings inequality into its persistent and transitory components. We find that the growth in earnings inequality reflects both an increase in long-run inequality and an increase in earnings instability. The large size of our earnings panel allows us to estimate and test richer models of earnings dynamics than could be supported by the relatively small panel surveys used in U.S. research. The Canadian data strongly reject several restrictions commonly imposed in the U.S. literature, and they also suggest that imposing these evidently false restrictions may lead to distorted inferences about earnings dynamics and inequality trends.

PD September 1999. **TI** Occupational Gender Composition and Wages in Canada: 1987-1988. **AU** Baker, Michael; Fortin, Nicole M. **AA** Baker: University of Toronto and NBER. Fortin: University of British Columbia. **SR** National Bureau of Economic Research Working Paper: 7371; National Bureau of Economic Research, 1050

Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 26. PR \$5.00. JE J16, J31, J38, J71, J78. KW Gender. Earnings Inequality. Wages. Pay Equity. Comparable Worth.

AB The relationship between occupational gender composition and wages is the basis of pay equity/comparable worth legislation. A number of previous studies have examined this relationship in US data, identifying some of the determinants of low wages in "female jobs", as well as important limitations of public policy in this area. There is little evidence, however, from other jurisdictions. This omission is particularly disturbing in the case of Canada, which now has some of the most extensive pay equity legislation in the world. In this paper, we provide a comprehensive picture, circa the late 1980's, of the occupational gender segregation in Canada and its consequences for wages. The sample period precedes many provincial pay equity initiatives and thus the results should provide a baseline for the evaluation of this legislation. We find that the estimated wage penalties in female jobs in Canada are generally much smaller than the estimates for the United States. Although there is some heterogeneity across worker groups, on average, the link between female wages and gender composition is small and not statistically significant.

Baliga, Sandeep

PD September 1999. **TI** Optimal Design of Peer Review and Self-Assessment Schemes. **AU** Baliga, Sandeep; Sjostrom, Tomas. **AA** Baliga: Northwestern University. Sjostrom: Pennsylvania State University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1290; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 37. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D82, O31. **KW** Mechanism Design. Self Assessment. Peer Review. Private Information. Invention.

AB A principal must decide whether or not to implement a project which originated with one of her employees. The employees have private information about the quality of the project. A successfully implemented project raises the inventor's chance of promotion, at his peer's expense, but a failed project may ruin the inventor's career. If the inventor is already ahead in his career, then he may be tempted to suppress his own ideas in order not to risk a big failure. If he is not ahead, then he is instead tempted to exaggerate the quality of his ideas in order to get ahead. The peer may either try to promote the inventor's bad ideas to see him fail, or to denigrate promising ideas to stop the inventor from getting ahead. Within the class of incentive compatible and renegotiation-proof mechanisms, self-assessment (without any peer reports) is optimal. Truth-telling can be guaranteed in different ways. For example, to avoid the exaggeration effect, the inventor can be promised some chance of promotion even if his project is cancelled, or he can be paid a relatively high wage when he is not promoted. We show how the optimal method depends on the parameters.

Baqir, Reza

PD August 2001. **TI** Districting and Government Overspending. **AA** International Monetary Fund.

SR International Monetary Fund Working Paper: WP/01/96; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 43. PR \$10.00. **JE** H11, H41, H72. **KW** Government Spending. Fiscal Institutions. Electoral Systems. Politics, Comparative.

AB The common-pool problem is a central issue in the relationship between the political structure of jurisdictions and the size of public spending. Models predict that, other things being equal, greater political districting of jurisdiction raises the scale of government. This paper presents new evidence on this and related predictions from a cross-section of city governments in the United States. The main finding is that one additional legislator is associated, on average, with 3 percent larger expenditures per capita. Evidence also suggests that forms of government with strong executives, particularly those with veto powers, break the link between districting and government size.

Barba Navaretti, Giorgio

PD April 2000. **TI** International Knowledge Flows and Economic Performance -- An Introductory Survey of the Evidence. **AU** Barba Navaretti, Giorgio; Tarr, David. **AA** Barba Navaretti: University of Ancona, Centro Studi Luca d'Agliano and Fondazione Eni Enrico Mattei. Tarr: The World Bank. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/27; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 18. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** F14, F21, F35 F43, O12, O33. **KW** Knowledge Flows. Technological Diffusion. Spillovers. Total Factor Productivity. Economic Growth. International Trade. Foreign Direct Investments.

AB The empirical analysis of the micro links between trade and knowledge diffusion allows us to distinguish among the key predictions of the theoretical literature on endogenous growth. This literature postulates that total factor productivity (TFP) is higher when trade gives access to a wider or more sophisticated range of technologies. The papers reviewed here find considerable evidence that imported technologies positively affect TFP in the importing countries, particularly in developing ones and when technologies are acquired by way of imports of intermediates. It also provides some support for the models that argue that exporting is an efficient learning channel. The role of foreign direct investment is more mixed, likely helping the economy but hurting domestic competitors.

Barlevy, Gadi

PD March 2000. **TI** Evaluating the Costs of Business Cycles in Models of Endogenous Growth. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1287; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 31. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** E21, E32, O41. **KW** Growth. Business Cycles. Consumption. Welfare Effects.

AB In his famous monograph, Lucas (1987) put forth an argument that the welfare gains from reducing the volatility of aggregate consumption are negligible. Subsequent work that has revisited Lucas' calculation has continued to find only

small benefits from reducing the volatility of consumption, further reinforcing the perception that business cycles don't matter. This paper argues instead that fluctuations could affect the growth process, which could have much larger effects than consumption volatility. I present an argument for why stabilization could increase growth without a reduction in current consumption, which could imply substantial welfare effects as Lucas (1987) already observed in his calculation. Empirical evidence and calibration exercises suggest that the welfare effects can be quite substantial, possibly as much as two orders of magnitude greater than Lucas' original estimates.

Barr, Abigail

PD 2000. **TI** Ethnicity and Wage Determination in Ghana. **AU** Barr, Abigail; Oduro, Abena. **AA** Barr: CSAE, University of Oxford. Oduro: Centre for Policy Analysis, Ghana. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/09; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 33. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** J31, J71. **KW** Ghana. Wage Determination. Ethnicity. **AB** This paper looks at earnings differentials between (1) members of different ethnic groups and (2) employers' relatives, unrelated co-ethnics, and other workers, in the Ghanaian manufacturing sector. We find that a significant proportion of the identified earnings differentials between ethnic groups can be explained with reference to a fairly standard set of observed workers' characteristics. Labor market segregation along ethnic lines combined with considerable variation in employer characteristics (possibly due to discrimination in other markets) accounts for most of the remaining differentials. There is no evidence of statistical discrimination between ethnic groups, although there is evidence of such discrimination in favor of inexperienced co-ethnic workers, who can be more easily assessed and matched to jobs than similar workers from other ethnic groups. Finally, workers who are related to their employers earn a considerable premium, possibly because they contribute more than their fellow workers to productivity.

PD 1999. **TI** Familiarity and Trust: An Experimental Investigation. **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/1999/23; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 24. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** D12, D63, I31. **KW** Zimbabwe. Trust. Familiarity. Resettlement.

AB In Zimbabwe, people in resettled villages trust each other less than people in non-resettled villages. This does not appear to be due to differences in socially transmitted rules of behavior. Further, there are good reasons to believe that it is not due to the self-selection of a particular type of person into resettlement. Rather, the variations appear to be due simply to a lack of familiarity and to the consequentially greater uncertainty faced by resettled villagers when trying to predict each other's behavior in strategic situations.

Barral, Julien

PD January 2001. **TI** Multifractal Products of Cylindrical Pulses. **AU** Barral, Julien; Mandelbrot, Benoit B. **AA** Barral: Universite Montepellier-II. Mandelbrot: Yale

University. **SR** Yale Cowles Foundation Discussion Paper: 1287; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. **PG** 34. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** C10, C60. **KW** Random Measures. Multifractal Analysis. Martingales. Statistically Self-Similar. Poisson Point Processes.

AB A new class of random multiplicative and statistically self-similar measures is defined on \mathbb{R} . It is the limit of measure-valued martingales constructed by multiplying random functions attached to the points of a statistically self-similar Poisson point process in a strip of the plane. Several fundamental problems are solved, including the non-degeneracy and the distribution of the limit measure, μ ; the finiteness of the (positive and negative) moments of the total mass of μ restricted to bounded intervals. Compared to the familiar canonical multifractals generated by multiplicative cascades, the new measures and their multifractal analysis exhibit strikingly novel features which are discussed in detail.

Barsky, Robert

PD February 2000. **TI** A Monetary Explanation of the Great Stagflation of the 1970s. **AU** Barsky, Robert; Kilian, Lutz. **AA** Barsky: University of Michigan and National Bureau of Economic Research. Kilian: University of Michigan. **SR** National Bureau of Economic Research Working Paper: 7547; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 34. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside US). **JE** E31, E32, E40. **KW** Business Cycles. Stagflation. OPEC.

AB This paper argues that oil price increases were not nearly as essential a part of the causal mechanism generating the Great Stagflation of the 1970s as is often thought. We provide a model that can explain the bulk of stagflation by monetary expansions and contractions without reference to supply shocks. Monetary fluctuations also help to explain variations in the price of oil (and other commodities) and help to account for the striking coincidence of major oil price increases and worsening stagflation. In contrast, there is no theoretical presumption that oil supply shocks are stagflationary. In particular, we show that oil supply shocks may lower the GDP deflator and there is little independent evidence that oil supply shocks actually raised the deflator (as opposed to the CPI). The oil supply shock view also fails to explain the dramatic surge in the price of other industrial commodities that preceded the 1973/74 oil price increase and the fact that increases in industrial commodity prices lead oil price increases in the OPEC period.

Bartolini, Stefano

PD November 1999. **TI** Endogenous Growth and Negative Externalities. **AU** Bartolini, Stefano; Bonatti, Luigi. **AA** Bartolini: University of Siena, Italy. Bonatti: University of Trento, Italy. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 99/91; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 28. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** O41, Q21. **KW** Common Property. Defensive Expenditure. Coordination Failure. Undesirable Growth. Environmental Assets. Social Assets. Substitution Process. Self-Fuelling Process.

AB In this paper, the expansion of private production erodes the quality of commonly owned goods, thereby forcing individuals to rely increasingly on private goods to satisfy their needs. In the face of this deterioration, households keep their labor supplies and saving rates relatively high in spite of their increasing private wealth. By so doing, each household contributes to an increase in production and thus has a detrimental -- though negligible -- impact on commonly owned goods. Perpetual growth is the outcome of this self-fuelling process. Since long-run growth results from a co-ordination failure, it may be higher than socially desirable.

Battaglini, Marco

PD July 2000. **TI** Multiple Referrals and Multidimensional Cheap Talk. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1295; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 31. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C70, D71, D72. **KW** Cheap Talk. Information Transmission. Uncertainty. Legislatures. Committees.

AB Cheap talk games have been widely used to analyze situations in which a policy maker needs expert advice. In previous work, uncertainty has almost always been modeled using a single-dimensional state variable. In this paper we prove that the dimensionality of the uncertain variable has an important qualitative impact on results and yields interesting insights into the "mechanics" of information transmission. Contrary to the unidimensional case, with more than one dimension full transmission of information in all states of nature is typically possible, provided a very simple and intuitive condition is satisfied. What really matters in transmission of information is the local behavior of senders' indifference curves at the ideal point of the policy maker (receiver), not the proximity of players' ideal points. This may explain the apparent conflict between informational theories of committees and the empirical evidence on the poor alignment of preferences between the Floor and committees in legislative organizations.

Bauwens, Luc

PD September 2000. **TI** Identifying Long-Run Behavior with Non-Stationary Data. **AU** Bauwens, Luc; Hunter, John. **AA** Bauwens: CORE. Hunter: Brunel University. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/43; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 10. **PR** \$100 per year. **JE** C10, C22, F31. **KW** Cointegration. Identification. Identifiability. Order Condition. Sufficient Conditions.

AB Results for the identification of non-linear models are used to support the traditional form of the order condition by sufficient conditions. The sufficient conditions reveal a two-step procedure for firstly checking generic identification and then testing identifiability. This approach can be extended to sub-blocks of the system and it generalizes to nonlinear restrictions. The procedure is applied to an empirical model of the exchange

rate, which is identified by diagonalizing the system.

Becker, Randy A.

PD December 1999. **TI** Costs of Air Quality Regulation. **AU** Becker, Randy A.; Henderson, J. Vernon. **AA** Becker: U.S. Bureau of the Census. Henderson: Brown University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 99/97; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 33. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D21, H73, L51, L65, Q25. **KW** Environmental Regulation. Costs. Investment. Plant Size. **AB** This paper explores some costs associated with environmental regulation. We focus on regulation pertaining to ground-level ozone (O₃) and its effects on two manufacturing industries -- industrial organic chemicals (SIC 2865-9) and miscellaneous plastic products (SIC 308). Both are major emitters of volatile organic compounds (VOC) and nitrogen oxides (NO_x), the chemical precursors to ozone. Using plant-level data from the Census Bureau's Longitudinal Research Database (LRD), we examine the effects of regulation on the timing and magnitudes of investments by firms and on the impact it has had on their operating costs. As an alternative way to assess costs, we also employ plant-level data from the Pollution Abatement Costs and Expenditures (PACE) survey.

Becker, Torbjorn

PD July 2001. **TI** Bond Restructuring and Moral Hazard: Are Collective Action Clauses Costly? **AU** Becker, Torbjorn; Richards, Anthony; Thaicharoen, Yungyong. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/92; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 27. **PR** \$10.00. **JE** F34, G12, G15. **KW** Bond Restructuring. Collective Action Clauses. Moral Hazard. Bond Yields. Contract Design.

AB Many official groups have endorsed the wider use by emerging market borrowers of contract clauses which allow for a qualified majority of bondholders to restructure repayment terms in the even of financial distress. Some have argued that such clauses will be associated with moral hazard and increased borrowing costs. This paper addresses this question empirically using primary and secondary market yields and finds no evidence that the presence of collective action clauses increases yields for either higher- or lower-rated issuers. By implication, the perceived benefits from easier restructuring are at least as large as any costs from increased moral hazard.

Beierle, Thomas C.

PD November 1998. **TI** Public Participation in Environmental Decisions: An Evaluation Framework Using Social Goals. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/06; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 34. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D72, D74, Q28, Q29. **KW** Public Participation. Dispute Resolution. Consensus Building. Trust. Social Capital.

AB This paper presents a framework for evaluating mechanisms that involve the public in environmental decision-making. These include traditional participatory mechanisms -- such as public hearings, notice and comment procedures, and advisory committees -- as well as those considered more

innovative -- such as regulatory negotiations, mediations, and citizen juries. The framework is based on a set of "social goals," defined as those goals which are valued outcomes of a participatory process, but which transcend the immediate interests of any party in that process. The goals are: educating the public, incorporating public values and knowledge into decision-making, building trust, reducing conflict, and assuring cost-effective decision-making.

TI The Federal Advisory Committee Act and Public Participation in Environmental Policy. **AU** Long, Rebecca J.; Beierle, Thomas C.

PD September 1999. **TI** Public Participation in Environmental Planning in the Great Lakes Region. **AU** Beierle, Thomas C.; Konisky, David M. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/50; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 72. **PR** Foreign: \$15.00 Air Mail: \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D71, D72, D81, Q28, Q38. **KW** Public Participation. Advisory Committees. Great Lakes. Remedial Action Planning. Conflict Resolution.

AB The need for greater public involvement in environmental decision-making has received much attention. However, there is relatively little information on what can be gained from greater public involvement and what makes some programs work while others fail. This paper addresses these questions through an evaluation of public participation in environmental planning in the Great Lakes region. The success of participation is measured using five criteria: educating participants, improving the substantive quality of decisions, incorporating public values into decision-making, reducing conflict, and building trust. The paper then discusses the relationship between success and a number of contextual and procedural attributes of a variety of cases. Data come from a "case survey," in which the authors code information from previously published studies of 30 participation cases. The authors conclude that public participation can accomplish important societal goals and that success depends, in large part, on the actions and commitment of government agencies.

Benabou, Roland

PD March 2000. **TI** Self-Confidence and Social Interactions. **AU** Benabou, Roland; Tirole, Jean. **AA** Benabou: Princeton University and National Bureau of Economic Research. Tirole: Universite des Sciences Sociales. **SR** National Bureau of Economic Research Working Paper: 7585; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 37. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** A12, C70, D10, D60, J22, J24, J53. **KW** Bargaining Theory. Household Behavior. Welfare Economics.

AB This paper studies the interactions between an individual's self-esteem and his social environment -- in the workplace, at school, and in personal relationships. Because a person generally has only imperfect knowledge of his own abilities, people who derive benefits from his performance (parent, spouse, friend, teacher, manager, etc.) have incentives to manipulate this self-confidence. By studying situations where an informed principal chooses an incentive structure, such as offering payments or rewards, delegating a task, or giving encouragement, it is shown that extrinsic rewards may

have hidden costs in that they undermine intrinsic motivation. Similarly, empowerment is likely to increase motivation, while offers of help may create a dependence. The paper next considers situations where people criticize or downplay the performance of their spouse, child, colleague, or subordinate, formalizing ego-bashing as reflecting battles for dominance or authority within the relationship. The final turn is to the self-presentation strategies of privately informed agents, studying in particular how depressed individuals may engage in self-deprecation as a way of seeking leniency (a lowering of expectancies) or a "helping hand" on various obligations.

Benfratello, Luigi

PD January 2000. **TI** Research Joint Ventures and Firm Level Performance. **AU** Benfratello, Luigi; Sembenelli, Alessandro. **AA** Benfratello: CERIS-CNR and FEEM. Sembenelli: University of Torino, CERIS-CNR and FEEM. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/13; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 21. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** O31, O38. **KW** Research Joint Ventures. European Union. Economic Performance.

AB In this paper we test whether participation in EU sponsored Research Joint Ventures (RJVs) has a positive impact on participating firms' performance. We apply our statistical methodology to RJVs sponsored under two different programs: EUREKA and (3rd and 4th) Programme Frameworks for Science and Technology (PFST). Overall results show a positive association between participation, labor and total factor productivity, and price cost margin only in the case of EUREKA. On the contrary, firms participating FPST RJVs do not show any clear pattern.

Bensidoun, Isabelle

PD December 2001. **TI** The Nature of Specialization Matters for Growth: An Empirical Investigation. **AU** Bensidoun, Isabelle; Gaulier, Guillaume; Unal-Kesenci, Deniz. **AA** CEPPII. **SR** CEPPII Working Paper: 2001/13; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 20. **PR** no charge. **JE** C33, F10, O41. **KW** Growth. Openness. Trade Specialization. Generalized Method of Moments.

AB Modern international trade theories show that the nature of the specialization of a country is non-neutral on its growth performances. However, most empirical studies concentrate on the relation between growth and trade openness at the macroeconomic level, i.e. without taking into account potential specialization effects. A rough examination of the data suggests that the growth performance of economies is not independent of their pattern of international specialization. After having illustrated this point, we show that the link between the nature of specialization and growth suggested by the data remains when other factors influencing growth are taken into account. The results do provide strong evidence that the growth effects of international integration depend on the type of products in which countries are specialized. In these circumstances, temporary protectionist measures that induce an economy to specialize in a growth-engine sector where it currently lacks comparative advantage should be preferred to openness, if long-term growth is at stake.

Bento, Antonio Miguel

TI Tax Deductible Spending, Environmental Policy, and the "Double Dividend" Hypothesis. **AU** Parry, Ian W. H.; Bento, Antonio Miguel.

TI Revenue Recycling and the Welfare Effects of Road Pricing. **AU** Parry, Ian W. H.; Bento, Antonio Miguel.

Bergemann, Dirk

PD September 2000. **TI** Entry and Vertical Differentiation. **AU** Bergemann, Dirk; Valimaki, Juuso. **AA** Bergemann: Yale University. Valimaki: University of Southampton. **SR** Yale Cowles Foundation Discussion Paper: 1277; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. **PG** 45. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** C72, C73, D43, D83, L15. **KW** Entry. Duopoly. Quantity Competition. Vertical Differentiation. Bayesian Learning.

AB This paper analyzes the entry of new products into vertically differentiated markets where an entrant and an incumbent compete in quantities. The value of the new product is initially uncertain and new information is generated through purchases in the market. We derive the (unique) Markov perfect equilibrium of the infinite horizon game under the strong long run average payoff criterion. The qualitative features of the optimal entry strategy are shown to depend exclusively on the relative ranking of established and new products based on current beliefs. Superior products are launched relatively slowly and at high initial prices whereas substitutes for existing products are launched aggressively at low initial prices. The robustness of these results with respect to different model specifications is discussed.

PD November 2000. **TI** The Financing of Innovation: Learning and Stopping. **AU** Bergemann, Dirk; Hege, Ulrich. **AA** Bergemann: Yale University. Hege: ESSEC Business School and CEPR. **SR** Yale Cowles Foundation Discussion Paper: 1292; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. **PG** 26. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** D83, D92, G24, G31, O32. **KW** Innovation. Venture Capital. Relationship Financing. Learning. Renegotiation.

AB This paper considers the financing of a research project under uncertainty about the time of completion and the probability of eventual success. The uncertainty about future success gradually diminishes with the arrival of additional funding. The entrepreneur controls the funds and can divert them. We distinguish between relationship financing, meaning that the entrepreneur's allocation of the funds is observable, and arm's length financing, where it is unobservable. We find that equilibrium funding stops altogether too early relative to the efficient stopping time in both financing modes. We characterize the optimal contracts and equilibrium funding decisions. The financial constraints will typically become tighter over time under relationship finance, and looser under arm's length financing. The trade-off is that while relationship financing may require smaller information rents, arm's length financing amounts to an implicit commitment to a finite funding horizon. The lack of such a commitment under relationship financing implies that the sustainable release of funds eventually slows down. We obtain the surprising result that

arm's length contracts are preferable in a Pareto sense.

Bergeron, Nancy

PD July 1999. **TI** The Impact of El Nino on Northeastern Forests: A Case Study on Maple Syrup Production. **AU** Bergeron, Nancy; Sedjo, Roger A. **AA** Bergeron: University of Maryland. Sedjo: Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/43; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 27. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D61, L66, N50, Q10, Q23. **KW** El Nino. Forests. Maple Syrup. Economic Welfare. Dieback.

AB El Nino events are likely to affect maple syrup production since it is very sensitive to weather events. A statistically significant direct correlation has not been found in the authors' preliminary analysis, however. This may be because many other factors affect production and because weather anomalies also occur in non-El Nino years. Few defensive activities are available to maple syrup producers to alleviate the negative impacts of weather anomalies on their production, even if a clear correlation between productivity and El Nino-Southern Oscillation events was eventually found. Overall, small welfare impacts of El Nino weather events are expected from their impact on the maple syrup industry. This is mainly because the share of maple syrup production in the economy is very small. Also, only a portion of the exploitable trees is under production and hence some excess capacity exists. Furthermore, maple syrup has numerous substitutes. The most unique and least substitutable feature of maple syrup production includes cultural and amenity values provided by the springtime sugaring off parties. The welfare impact, through the lack of substitute, would be greater if this tradition were to disappear altogether.

Bergin, James

PD February 1999. **TI** Comparative Dynamics. **AU** Bergin, James; Bernhardt, Dan. **AA** Bergin: Queen's University. Bernhardt: University of Illinois. **SR** Queen's Institute for Economic Research Discussion Paper: 981; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html. **PG** 17. **PR** Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. **JE** C72, C73. **KW** Introspectively Stable. Imitatively Stable. Nash Equilibrium. Relative Equilibrium. Strategic Substitutes. Strategic Complements.

AB This paper develops a dynamic evolutionary model in which agents make choices on the basis of relative performance criteria. We distinguish two classes of learned behavior: imitative dynamics and a new class of dynamics, "introspective dynamics." Under imitative dynamics, agents compare payoffs of different agents in the population and tend to imitate more successful behavior in the population. Under introspective dynamics, agents compare their own current with past payoffs and tend to select actions that provide higher payoffs. With introspective dynamics, under weak regularity conditions, the stochastically stable set of states is contained in the set of Nash equilibria, providing a novel rationale for Nash equilibrium behavior. With imitative dynamics, under mild regularity conditions there is a unique stochastically stable state, but it is not a Nash equilibrium. We consider both forms of dynamics in

the contexts of games satisfying strategic substitutes and strategic complements.

Bergstresser, Daniel

PD March 2000. **TI** Do After-Tax Returns Affect Mutual Fund Inflows? **AU** Bergstresser, Daniel; Poterba, James M. **AA** Bergstresser: Massachusetts Institute of Technology. Poterba: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7595; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 31. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** G11, G23, H24. **KW** Portfolio Choice. Mutual Funds. Capital Gains.

AB This paper explores the relationship between the after-tax returns that taxable investors earn on equity mutual funds and the subsequent cash inflows to these funds. Previous studies have documented that funds with high pretax returns attract greater inflows. This paper investigates the relative predictive power of pre-tax and after-tax returns for explaining annual fund inflows. The empirical results, based on a large sample of equity mutual funds over the period 1993-1998, suggest that after-tax returns have more explanatory power than pretax returns in explaining inflows. In addition, funds with large "overhangs" of unrealized capital gains experience smaller inflows, all else being equal, than funds without such unrealized gains. By disaggregating net fund inflows into gross inflows and gross redemptions, the paper also provides some insight on how after-tax returns and prospective capital gain realizations affect investor behavior.

Berlage, Lode

PD June 2000. **TI** Prospective Aid and Indebtedness Relief: A Proposal. **AU** Berlage, Lode; Cassimon, Danny; Dreze, Jacques H.; Reding, Paul. **AA** Berlage: K.U.Leuven. Cassimon: UFSIA. Dreze: CORE. Reding: FUNDP. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/32; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 29. **PR** \$100 per year. **JE** F34, F35, F42, O19, O20. **KW** Foreign Aid. Developing Countries. Human Development. International Debt.

AB Primary needs of human development are not met in poor developing countries. Although ambitious goals have been set by the international community to meet specific human development targets by 2015, Official Development Aid is lagging and excessive external debt continues to drain much needed resources from poor countries despite the recent HIPC (Highly Indebted Poor Countries) Initiative. This paper outlines a 15-year program for implementing the 2015 Human Development targets while resolving fully the debt overhang problem for a set of 49 poor countries. The proposal requires additional contributions from 23 rich countries amounting to 0.1 of 1% of their GDP over each of the 15 years. Although only a small part of the effort would take the form of debt cancellation, the outstanding debt of the 49 poor countries would be totally extinct by year 2015. The program relies on several basic premises: a long-term commitment by donors; a fair burden sharing among creditors; a fair distribution of newly available resources among poor countries, heavily indebted or

not; a targeting of these resources to human development programs; a conditionality guaranteeing reasonable aid effectiveness.

Berman, Eli

PD February 2000. **TI** Fertility, Migration, and Altruism. **AU** Berman, Eli; Rzakhanov, Zaur. **AA** Berman: Boston University and National Bureau of Economic Research. Rzakhanov: Brandeis University. **SR** National Bureau of Economic Research Working Paper: 7545; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 34. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside US). **JE** D10, D64, D90, F22, J10, N30. **KW** Migration. Altruism.

AB Consider migration to a higher income region as a human capital investment in which parents bear migration costs and children share returns. Migrants from a population with heterogeneous intergenerational discount rates will be self-selected on intergenerational altruism. Thus, immigrants may be self-selected on fertility. Soviet Jews who migrate to Israel despite high migration costs have significantly more children than members of the same birth cohort who migrate later when costs are low. We distinguish selection from treatment effects using a comparison group of women who migrate after childbearing age. We also find that immigrants favor bequests more and spend more time with their grandchildren in the U.S. Health and Retirement Survey. Selection on altruism can explain why historically immigrant-absorbing countries like the U.S. have higher fertility than other countries at comparable income levels. It provides an alternative explanation for Chiswick's classic earnings-overtaking result. Selection on altruism also implies that immigrant-absorbing regions will grow faster, or have higher per capita income, or both.

Bernhardt, Dan

PD August 2000. **TI** Long-Term Information: Short-Lived Derivative Securities. **AU** Bernhardt, Dan; Davies, Ryan; Spicer, John. **AA** Bernhardt: University of Illinois. Davies: Queen's University. Spicer: Europe Economics. **SR** Queen's Institute for Economic Research Discussion Paper: 994; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html. **PG** 35. **PR** Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. **JE** D81, D83, G14, G14. **KW** Private Information. Liquidity. Derivative Securities. Strategic Trade.

AB This paper explores strategic trade in short-lived derivative securities by agents that possess long-term information about an underlying asset. In contrast to trading equity, where an informed agent will ultimately benefit from his trades, trading short-lived securities is profitable only if the price impounds the private information before expiry. A consequence is that a risk neutral informed agent's holdings of the short-lived security affect his trading behavior: Past informed trading leads to greater future informed trading. The shorter horizon in which information must be impounded for a short-lived security to pay off makes an informed agent more reluctant to trade at earlier dates. By characterizing the conditions under which liquidity traders choose to incur extra costs to roll over their short-term positions rather than trade in longer-term derivative securities, we provide a possible

explanation for why most markets for longer-term derivative securities have little liquidity and large bid-ask spreads.

TI Comparative Dynamics. **AU** Bergin, James; Bernhardt, Dan.

Bernheim, B. Douglas

PD October 1999. **TI** The Adequacy of Life Insurance: Evidence from the Health and Retirement Survey. **AU** Bernheim, B. Douglas; Forni, Lorenzo; Gokhale, Jagadeesh; Kotlikoff, Laurence J. **AA** Bernheim: Stanford University and NBER. Forni: Boston University. Gokhale: Federal Reserve Bank of Cleveland. Kotlikoff: Boston University and NBER. **SR** National Bureau of Economic Research Working Paper: 7372; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 36. **PR** \$5.00. **JE** C88, D91, G22, J14, J26. **KW** Life Insurance. Retirement. Life Cycle Models. Financial Planning.

AB This study examines the adequacy of life insurance among married American couples approaching retirement. It improves upon previous work in two ways. First, it is based on recent, high quality data (the 1992 Health and Retirement Survey with matched Social Security earnings histories). Second, it employs new financial planning software to evaluate the life insurance needs of each household. This software embodies an elaborate life-cycle planning model that accounts for a broad array of demographic, economic, and financial characteristics. The authors find that a sizable minority of couples in the HRS sample are significantly underinsured. Almost one third of wives and more than 10 percent of husbands would have suffered living standard reductions of 20 percent or more had their spouses died in 1992. Underinsurance tends to be more common among low income households, couples with asymmetric earnings, younger households, couples with dependent children, and non-whites. In general, households with greater life vulnerabilities do not appear to compensate adequately for these vulnerabilities through greater life insurance holdings. Among some groups, the frequency of underinsurance exceeds two-thirds.

Bertrand, Marianne

PD March 2000. **TI** Public Policy and Extended Families: Evidence from South Africa. **AU** Bertrand, Marianne; Miller, Douglas; Mullainathan, Sendhil. **AA** Bertrand: Princeton University and National Bureau Of Economic Research. Miller: Princeton University. Mullainathan: MIT and National Bureau Of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7594; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 30. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** D10, E20, H23, I38, O15. **KW** Income Redistribution. Retirement. South Africa. Labor Supply.

AB Tightly-knit extended families, in which people often transfer money among relatives, characterize many developing countries. These intra-family flows mean that public policies may affect a very different group of people than the one they target. By studying a cash pension program in South Africa that targets the elderly, the paper assesses the empirical importance of these effects. A sharp drop in the labor force participation of prime-age men in three-generation households is found when elder women reach 60 years old or elder men reach 65, the respective ages for pension eligibility. We also find that the

drop in labor supply diminishes with family size, as the pension money is split over more people, and with educational attainment, as the pension money becomes less significant relative to outside earnings. Other findings suggest that power within the family might play an important role: (1) labor supply drops less when the pension is received by a man rather than by a woman; (2) middle aged men (those more likely to have control in the family) reduce labor supply more than younger men; and (3) female labor supply is unaffected.

PD March 2000. **TI** Do CEOs Set Their Own Pay? The Ones Without Principals Do. **AU** Bertrand, Marianne; Mullainathan, Sendhil. **AA** Bertrand: Princeton University and National Bureau of Economic Research. Mullainathan: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7604; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 38. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** G30, J30, J40, L20. **KW** Executive Compensation. Firm Behavior.

AB This paper empirically examines two competing views of CEO pay. In the contracting view, the compensation committee optimally chooses contracts which give the CEO incentives to maximize shareholder wealth. In the skimming view, CEOs have managed to capture the pay process so that they set their own pay, constrained by the availability of cash or a fear of drawing attention. We first examine how CEO pay responds to luck (i.e., observable shocks to performance beyond the CEO's control). Using several measures of luck, such as changes in oil price for the oil industry, we find substantial pay for luck. Pay responds about as much to a "lucky" dollar as to a general dollar. Still, better governed firms pay their CEOs less for luck. Secondly, we examine how much CEOs are charged for options granted. Since options never appear on balance sheets, they offer an appealing way to skim. Not surprisingly, CEOs in better-governed firms are charged more for options. These results suggest that both views of CEO pay matter. In poorly governed firms the skimming view fits better, while in well-governed firms, the contracting view fits better.

Bhattacharya, Sudipto

PD October 1999. **TI** Insider Trading, Investment and Liquidity. **AU** Bhattacharya, Sudipto; Nicodano, Giovanna. **AA** Bhattacharya: London School of Economics. Nicodano: Università degli Studi di Torino. **SR** Centre for Economic Policy Research Discussion Paper: 2251; CEPR, 90- 98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 32. **PR** 5 pounds, \$8 or 8 euros. **JE** D52, D82, G14. **KW** Portfolio Choice. Incomplete Markets. Private Information. Rational Expectations.

AB This paper compares competitive equilibrium outcomes with and without trading by a privately informed "monopolistic" insider, in a model with real investment portfolio choices ex ante, and noise trading generated by aggregate uncertainty regarding other agents' intertemporal consumption preferences. The welfare implications of insider trading for the ex ante expected utilities of outsiders are analyzed. The role of interim information revelation due to insider trading, in improving the risk-sharing among outsiders with stochastic liquidity needs, is examined in detail.

Bigsten, Arne

PD 2000. **TI** Exports and Firm-Level Efficiency in

African Manufacturing. **AU** Bigsten, Arne; Collier, Paul; Dercon, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Oduro, Abena; Oostendorp, Remco; Pattillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert. **AA** Bigsten: University of Gothenburg. Collier: World Bank and CSAE, University of Oxford. Dercon, Fafchamps, Soderbom and Teal: CSAE, University of Oxford. Gauthier: Ecole des Hautes Etudes Commerciales, Montreal. Gunning and Oostendorp: Free University. Oduro: University of Ghana, Legon. Pattillo: IMF. Zeufack: World Bank. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/16; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 24. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** D21, D24, F41, F43, O12. **KW** African Manufacturing. Panel Data. Exports. Efficiency. Learning-By-Exporting. **AB** In this paper, we use firm-level panel data for the manufacturing sector in four African countries to estimate the effect of exporting on efficiency. Measures of firm-level efficiency using stochastic production frontier models are constructed for the period 1992 to 1995. We find that there are large efficiency gains from exporting both in terms of levels and growth, and contrary to China, the gains are largest for the new entrants to exporting. We control for unobserved heterogeneity using a dynamic model with correlated random effects. Results are robust and consistently, we find evidence of a learning-by-exporting effect as well as self-selection of the most efficient firms into exporting. The effect of exporting on efficiency appears to be larger in this African sample than in comparable studies of other regions that is consistent with the smaller size of domestic markets.

PD 2000. **TI** Credit Constraints in Manufacturing Enterprises in Africa. **AU** Bigsten, Arne; Collier, Paul; Dercon, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Oduro, Abena; Oostendorp, Remco; Pattillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert. **AA** Bigsten: University of Gothenburg. Collier: World Bank and CSAE, University of Oxford. Dercon, Fafchamps, Soderbom and Teal: CSAE, University of Oxford. Gauthier: Ecole des Hautes Etudes Commerciales, Montreal. Gunning and Oostendorp: Free University. Oduro: University of Ghana, Legon. Pattillo: IMF. Zeufack: World Bank. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/24; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 35. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** D92, G21, O16, O55. **KW** Credit Constraints. Credit Markets. Panel Data. Firm Data. Africa.

AB We investigate the question whether firms in the manufacturing sector in Africa are credit constrained, using firm level panel data from six countries. We distinguish in the data the demand for credit from actively applying for formal loans. We find that more than half the firms in the sample had no demand for credit. Of those firms with a demand for credit, only a quarter obtained a formal sector loan. In line with expectations, our analysis suggests that banks allocate credit on the basis of expected profits, but there is a bias against small firms, while outstanding debt is positively related with obtaining further lending. The evidence is suggestive of market inefficiencies. Finally, we could not detect any differences between countries in the effects of these factors in the credit

allocation rule, although financial deepening is found to explain most of the country-specific fixed effects.

PD 1999. **TI** Contract Flexibility and Dispute Resolution in African Manufacturing. **AU** Bigsten, Arne; Collier, Paul; Dercon, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Oduro, Abena; Oostendorp, Remco; Pattillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert. **AA** Bigsten: University of Gothenburg. Collier: World Bank and CSAE, University of Oxford. Dercon, Fafchamps, Soderbom and Teal: CSAE, University of Oxford. Gauthier: Ecole des Hautes Etudes Commerciales, Montreal. Gunning and Oostendorp: Free University. Oduro: University of Ghana, Legon. Pattillo: IMF. Zeufack: World Bank. **SR** Centre for the Study of African Economies Working Paper: WPS/1999/20; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 29. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** D23, K12, O17. **KW** Contractual Risk. Market Institutions. Africa. Courts.

AB This paper examines the contractual practices of African manufacturing firms using survey data collected in Burundi, Cameroon, Cote d'Ivoire, Kenya, Zambia, and Zimbabwe. Descriptive statistics and econometric results are presented. They show that contractual flexibility is pervasive and that relational contracting is the norm between manufacturers, their suppliers, and their clients. The existence of long-term relations between firms helps them deal with contract non-performance through negotiation. Confrontational methods such as lawyers and courts are used only by large firms and when negotiations fail. Whenever confrontation can be avoided, business is resumed. Of the six studied countries, incidence of breach and the use of lawyers and courts are highest in Zimbabwe which is also the country with legal institutions that best support business. Our favored interpretation is that good legal institutions incite firms to take more chances, thereby encouraging trade and leading to more cases of breach and more recourse to courts and lawyers. A high frequency of contract non-compliance should thus not be interpreted as a sign of imperfect legal institutions.

Billups, Stephen C.

TI A Dynamic Model of Differential Human Capital and Criminal Activity. **AU** Mocan, H. Naci; Billups, Stephen C.

Bingham, Benedict

TI Domestic Petroleum Price Smoothing in Developing and Transition Countries. **AU** Federico, Giulio; Daniel, James A.; Bingham, Benedict.

Binkley, Clark S.

PD January 1999. **TI** Forestry in the Next Millennium: Challenges and Opportunities for the USDA Forest Service. **AA** Hancock Timber Resource Group. **SR** Resources for the Future Discussion Paper: 99/15; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 16. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** H41, H42, Q23, Q28. **KW** Forestry. Forest Service. Environmental Management. Timber. Forest Plantations.

AB Throughout the globe, forestry faces predictable trends associated with the transition from reliance on natural forests to ones created through human stewardship. Laid over the

ordinary economics of this transition are increases in the values of the environmental services that forests provide. The three general approaches to forest management -- natural forest management, plantation forest management, and preserve management -- are evaluated in this economic context. The USDA Forest Service has interesting opportunities to apply each approach, but doing so will require profound organizational changes.

Binmore, Ken

PD September 2000. **TI** Does Minimax Work? An Experimental Study. **AU** Binmore, Ken; Swierzbinski, Joe; Proulx, Chris. **AA** Binmore and Swierzbinski: University College London. Proulx: UC Santa Barbara. **SR** University College London Discussion Papers in Economics: 2000/05; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 22. **PR** 4 pounds or \$8.00. **JE** C70, C92. **KW** Minimax Theorem. Zero-Sum Games. Experiments. Game Theory.

AB This paper finds experimental support for Von Neumann's minimax theory in two-person, zero-sum games.

Biswal, Bagala

TI An Empirical Analysis of the Impact of Public Expenditures on Education and Health on Poverty in Indian States. **AU** Jha, Raghendra; Biswal, Bagala; Biswal, Urvashi D.

Biswal, Urvashi D.

TI An Empirical Analysis of the Impact of Public Expenditures on Education and Health on Poverty in Indian States. **AU** Jha, Raghendra; Biswal, Bagala; Biswal, Urvashi D.

Blackman, Allen

PD May 2000. **TI** Informal Sector Pollution Control: What Policy Options Do We Have? **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/02R; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 25. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** O13, O17, Q28, Q29, Q38. **KW** Informal Sector. Environmental Policy. Latin America. Pollution. Developing Countries.

AB In developing countries, urban clusters of informal firms such as brick kilns and leather tanneries can create severe pollution problems. However, these firms are quite difficult to regulate for a variety of technical and political reasons. Drawing on the literature, this paper first develops a list of feasible environmental management policies. It then examines how these policies have fared in four independent efforts to control emissions from informal brick kilns in northern Mexico. The case studies suggest that: (i) conventional command and control process standards are generally only enforceable when buttressed by peer monitoring, (ii) surprisingly, clean technologies can be successfully diffused even when they raise variable costs, in part because early adopters have an economic incentive to promote further adoption, (iii) boycotts of "dirty" goods sold in informal markets are unenforceable, (iv) well-organized informal firms can block implementation of costly abatement strategies such as relocation, and (v) private-sector-led initiatives may be best suited for informal sector pollution

control.

PD July 2000. **TI** Tailored Regulation: Will Voluntary Site-Specific Environmental Performance Standards Improve Welfare? **AU** Blackman, Allen; Boyd, James. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/03R; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 29. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** K32, L13, L51, Q28. **KW** Tailored Regulation. Environmental Regulation. Oligopoly. Performance Standards. Regulatory Reform.

AB Increasingly popular tailored regulation (TR) initiatives like EPA's Project XL allow plants to voluntarily substitute site-specific environmental performance standards for command-and-control regulations that dictate pollution abatement strategies. TR can significantly reduce participants' costs of complying with environmental regulations. But in doing so, it can also provide participants with a competitive advantage. We show that this can have undesirable welfare consequences when it enables relatively inefficient firms in oligopolistic markets to "steal" market share from more efficient firms. One critical determinant of whether or not TR has such adverse welfare impacts is the regulator's policy regarding the diffusion of TR agreements among non-participating firms.

PD May 2001. **TI** Location Efficient Mortgages: Is the Rationale Sound? **AU** Blackman, Allen; Krupnick, Alan. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/49R; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 23. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** G21, Q24, Q28, R10, R40. **KW** Location Efficiency. Mortgages. Default. Urban Sprawl.

AB Location efficient mortgages (LEM) programs are an increasingly popular approach to combating urban sprawl. LEMs allow families who want to live in densely-populated, transit-rich communities to obtain larger mortgages with smaller downpayments than traditional underwriting guidelines allow. LEMs are premised on the proposition that homeowners in such "location efficient" areas can safely be allowed to breach underwriting guidelines designed to prevent mortgage default because they have lower than average automobile-related transportation expenses and more income available for mortgage payments. This paper employs records of over 8,000 FHA-insured mortgages matched with data on various measures of location efficiency to test this proposition. Our results suggest that it does not hold and that LEMs -- like other low-downpayment mortgage programs -- will raise mortgage default rates. This cost must be weighed against any potential anti-sprawl benefits LEMs may have.

PD April 1999. **TI** The Cost of Developing Site-Specific Environmental Regulations: Evidence from EPA's Project XL. **AU** Blackman, Allen; Mazurek, Janice. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/35; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 24. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** L51, Q28. **KW** Project XL. EPA. Regulatory Reform. Site-Specific Regulation. Environmental Regulation.

AB The flagship of the Environmental Protection Agency's regulatory reinvention initiative, Project XL has been touted as a 'regulatory blueprint' for a site-specific, performance-based pollution control system. But widespread complaints about the

costs of the program beg the question of whether the costs of tailoring regulations to individual facilities are manageable. To address this question, this paper presents original survey data on a sample of 11 XL projects. The authors find that the fixed costs of putting in place XL agreements are substantial. They find that the costs actually arise mainly from interaction between participating facilities and the EPA. Moreover, EPA management problems are perceived by the survey respondents as having inflated project development costs. Finally, the authors find that the key factor that explains differences in costs across XL projects is the scope and complexity of the project proposal. These findings suggest that Project XL favors large firms that can afford to pay significant project development costs, that EPA management problems must be resolved to reduce costs, and that there may be a significant economic bias against complex and innovative proposals -- precisely the type of proposals that Project XL was designed to foster.

PD May 1999. **TI** The Use of Economic Incentives in Developing Countries: Lessons from International Experience with Industrial Air Pollution. **AU** Blackman, Allen; Harrington, Winston. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/39; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 37. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** O13, Q25, Q28. **KW** Environmental Policy. Economic Incentives. Market-Based Instruments. Developing Countries. Air Pollution.

AB To what extent should developing countries eschew conventional command and control environmental regulation that is increasingly seen as inefficient and rely instead on economic incentives? This paper addresses this question as it pertains to industrial air pollution. The paper discusses the advantages and disadvantages of various economic incentive instruments, presents in-depth case studies of their application in Sweden, the United States, China, and Poland, and proposes a number of policy guidelines. The authors argue that both design deficiencies and pervasive constraints on monitoring and enforcement impede the effectiveness of economic instruments in developing countries. The latter are difficult to rectify, at least in the medium term. As a result, tradable permits are generally not practical. Suitably modified however, emissions fee policies probably are appropriate. They can provide a foundation for a transition to an effective economic incentive system, and can raise much needed revenue for environmental projects and programs. In addition, if political opposition can be overcome, environmental taxes constitute a second- best but potentially effective pollution control instrument.

PD June 1999. **TI** The Economics of Technology Diffusion: Implications for Climate Policy in Developing Countries. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/42; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 12. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** O33, O38, Q25, Q28, Q48. **KW** Technology Diffusion. Climate Change. Developing Countries. Air Pollution. Environmental Policy.

AB Recent efforts to forge a consensus on the role developing countries should play in reducing global greenhouse gas emissions have focused attention on climate friendly technologies (CFTs), most notably those that enhance energy efficiency. In the medium term, the effectiveness of technology-based climate strategies will depend critically on

the rates at which CFTs diffuse in developing countries. This paper reviews some of the key findings of the economics research on technology diffusion and assesses the implications for climate policy. The most obvious lessons from this research are that widespread diffusion of CFTs may take decades, and that diffusion rates in developing and industrialized countries are likely to be quite different. In addition, the literature has implications for a number of strategies for promoting technology diffusion including information dissemination, factor price rationalization, and investment in human capital.

Blackorby, Charles

PD March 2001. **TI** The Axiomatic Approach to Population Ethics. **AU** Blackorby, Charles; Bossert, Charles; Donaldson, David. **AA** Blackorby: University of British Columbia and GREQAM. Bossert: Universite de Montreal and CRDE. Donaldson: University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 01/03; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 40. **PR** International. **JE** A13, D63, R23. **KW** Population Ethics. Repugnant Conclusion. Sadistic Conclusion.

AB This paper examines several families of population principles in the light of a set of axioms. In addition to the critical-level utilitarian, number-sensitive critical-level utilitarian and number- dampened families and their generalized counterparts, we consider the restricted number-dampened family (suggested by Hurka) and introduce two new families: the restricted critical-level and restricted number-dependent critical-level families. Subsets of the restricted families have nonnegative critical levels and avoid both the repugnant and sadistic conclusions but fail to satisfy an important independence condition. We defend the critical-level principles with positive critical levels.

Blanchard, Olivier

PD February 2000. **TI** What Do We Know About Macroeconomics That Fisher and Wicksell Did Not? **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7550; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 41. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside US). **JE** B10, B22, E30. **KW** Macroeconomics.

AB In this essay, I argue that the history of macroeconomics during the 20th century can be divided in three epochs: Pre-1940: a period of exploration, when macroeconomics was not macroeconomics yet, but half monetary theory, half business cycle theory. A period of confused development, because of the lack of an integrated framework. From 1940 to 1980: a period of consolidation, during which an integrated framework was developed -- starting with the IS-LM, all the way to dynamic general equilibrium models -- and used to clarify the role of shocks and propagation mechanisms in fluctuations. But it treated imperfections too casually, leading to a crisis in the late 1970s. Since 1980: a new period of exploration, focusing on the role of imperfections in macroeconomics, from the relevance of nominal price setting, to incompleteness of markets, to asymmetric information, to search and bargaining in decentralized markets, leading to one of the most productive

periods of research in macroeconomics.

Blaschke, Winfrid

PD June 2001. **TI** Stress Testing of Financial Systems: An Overview of Issues, Methodologies, and FSAP Experiences. **AU** Blaschke, Winfrid; Jones, Matthew T.; Majnoni, Giovanni; Peria, Soledad Martinez. **AA** Blaschke and Jones: International Monetary Fund. Majnoni and Peria: World Bank. **SR** International Monetary Fund Working Paper: WP/01/88; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 39. **PR** \$10.00. **JE** G10, G21. **KW** Stress Testing. Risk. Financial Sector Assessment Program (FSAP).

AB The paper has three objectives. After a general introduction to some of the concepts and basic techniques of stress testing, the paper gives an overview of some of the conceptual issues involved in evaluating risks at the aggregated level of financial systems. Secondly, this study provides a basic framework and toolkit for conducting stress tests. Finally, the paper reviews some of the stress-testing analyses conducted in the context of the Financial Sector Assessment Program (FSAP) and suggests simplified approaches to deal with situations where the quantity and quality of the data is less than ideal.

Bloch, Francis

PD April 2000. **TI** Agenda Control in Coalition Formation. **AU** Bloch, Francis; Rottier, Stephane. **AA** University Catholique de Louvain. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/16; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 32. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C72, D72. **KW** Coalition Formation. Agenda Control. Government Formation.

AB Theoretical models of government formation in political science usually assume that the head of state is non-strategic. In this paper, we analyze the power of an agenda setter who chooses the order in which players are recognized to form coalitions in simple games. We characterize those sets of players which can be imposed in the equilibrium coalition and show that the only decisive structures where the agenda setter can impose the presence of any minimal winning coalition are apex games, where a large player forms a winning coalition with any of the small players.

Bloise, Gaetano

PD August 2000. **TI** Sunspot Equilibria in a Monetary Economy with Capital Accumulation. **AU** Bloise, Gaetano; Magris, Francesco. **AA** Bloise: CORE. Magris: University of Cambridge. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/40; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 14. **PR** \$100 per year. **JE** E10, E21, E22, E32, E43. **KW** Money. Capital Accumulation. Indeterminacy. Sunspot Equilibrium. Invariant Set.

AB In this paper, we consider the determinacy of equilibrium prices, interest rates and income in an economy with liquidity constraints and capital accumulation. In particular, we show that, even though no extrinsic uncertainty affects fundamentals, under some conditions, rational expectations equilibria exist in

which prices and quantities exhibit repetitive and persistent fluctuations. To prove the existence of such sunspot equilibria, we introduce a technique of general applicability to nonlinear macroeconomic models.

Blonigen, Bruce A.

PD October 1999. **TI** Antidumping Investigations and the Pass-Through of Exchange Rates and Antidumping Duties. **AU** Blonigen, Bruce A.; Haynes, Stephen E. **AA** Blonigen: University of Oregon and NBER. Haynes: University of Oregon. **SR** National Bureau of Economic Research Working Paper: 7378; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** \$5.00. **JE** F13, F31, L11. **KW** Exchange Rate Pass-Through. Antidumping Duties. Commercial Policy. International Finance. Foreign Exchange.

AB We present a model that shows that exchange rate pass-through is likely to be substantially altered when firms face antidumping (AD) duties and that optimal pass-through of AD duties may be up to 200 percent. We examine both pass-through issues using monthly prices across 345 U.S.-imported Canadian iron and steel products from 1989 through 1995, some of which received duties in U.S. AD cases filed in 1992. We find that exchange rate pass-through rises dramatically after products received AD duties, with no such change for closely-related products not subject to final AD duties. This result has important implications for previous studies that have pooled AD and non-AD products. We also find that pass-through of the final AD duties is 160 percent, which is consistent with our model's predictions.

Blundell, Richard

PD July 1998. **TI** Nonparametric Engel Curves and Revealed Preference. **AU** Blundell, Richard; Browning, Martin; Crawford, Ian A. **AA** Blundell and Crawford: University College London and IFS. Browning: University of Copenhagen and McMaster University. **SR** University College London Discussion Papers in Economics: 98/08; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 54. **PR** 4 pounds or \$8.00. **JE** C14, C43, D11, D12. **KW** Consumer Demand. Nonparametric Regression. Revealed Preferences.

AB This paper applies revealed preference theory to the nonparametric statistical analysis of consumer demand. It exploits the idea that price-taking individual households in the same market face the same relative prices, in order to smooth across the demand of individuals for each common price regime. This is shown to provide a stochastic structure within which to examine the consistency of household level data and revealed preference theory. An application is made to a long time series of repeated cross-sections from the 1974-1993 Family Expenditure Surveys. The consistency of this data with revealed preference theory is examined. Where rejections do occur, suitable adjustments to prices for quality or taste changes are explored. For periods of consistency with revealed preferences bounds are placed on true cost of living indices.

Boadway, Robin

PD January 1999. **TI** A Minimum Wage can be Welfare-Improving and Employment-Enhancing. **AU** Boadway, Robin; Cuff, Katherine. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion

Paper: 980; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html. PG 34. PR Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. JE H21, H23, J38. KW Minimum Wage. Optimal Income Tax. Unemployment.

AB We examine whether minimum wages can fulfill a useful role as part of an optimal non-linear income tax scheme. In this setting, governments cannot observe household abilities, only their incomes. Redistributing according to income, the government is constrained by a set of incentive constraints. Firms, on the other hand, are able to identify abilities of workers. To exploit that, the government imposes a minimum wage. This will preclude firms from offering a job to anyone below the minimum wage. The use of the minimum wage policy combined with the institutional features of typical welfare systems allows the incentive constraints to be severed at the ability level associated with the minimum wage. If such a scheme can be enforced, the government can increase the amount of redistribution from those working to those not working. Moreover, the optimal minimum wage may actually lower the number of unemployed.

PD February 1999. **TI** Monitoring Job Search as an Instrument for Targeting Transfers. **AU** Boadway, Robin; Cuff, Katherine. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 982; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html. PG 25. PR Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. JE H21, I38, J65. KW Redistribution. Monitoring. Unemployment. Targeting.

AB Redistribution programs are constrained because those not working may be either unable to work, voluntarily unemployed or involuntarily unemployed. The inability to distinguish among these three cases inhibits the targeting of transfers to those most in need. Enabling the government to monitor whether unemployed individuals are searching for work and accepting any offered jobs increases instability to redistribute income. We show that these monitoring activities are complementary, and consider how a minimum wage might be a useful adjunct to monitoring contingent tax-transfer policies.

PD March 1999. **TI** Redistribution. **AU** Boadway, Robin; Keen, Michael. **AA** Boadway: Queen's University. Keen: International Monetary Fund, University of Essex and Institute for Fiscal Studies. **SR** Queen's Institute for Economic Research Discussion Paper: 983; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html.

PG 103. PR Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. JE D31, D63, D71, H23, I31. KW Redistribution. Inequality.

AB This paper, prepared for the Handbook of Income Distribution (edited by A.B. Atkinson and F. Bourguignon), reviews some of the central issues that arise in thinking about the motives for, politics of, constraints on and measurement of, redistribution. Amongst the themes are: the potential usefulness of apparently inefficient policy instruments in overcoming the self-selection constraints on redistribution and limiting the

damage that ill-intentioned policymakers can do; the continued (perhaps increased) ignorance as to the effective incidence of many key taxes and benefits; and, while there are circumstances in which redistribution may plausibly generate efficiency gains, the likelihood that some trade-off between equity and efficiency is inescapable.

PD April 1999. **TI** Optimal Income Taxation with Quasi-Linear Preferences Revisited. **AU** Boadway, Robin; Cuff, Katherine; Marchand, Maurice. **AA** Boadway and Cuff: Queen's University. Marchand: Universite Catholique de Louvain. **SR** Queen's Institute for Economic Research Discussion Paper: 984; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html. PG 29. PR Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. JE H21, H23. KW Optimal Income Tax. Quasi-Linear Preferences.

AB With quasi-linear in leisure preferences, closed-form solutions for the marginal tax rates and the marginal utility of consumption under utilitarian and maxi-min objectives depend only on the skill distribution. Bunching induced by binding second-order incentive conditions also depends only on the distribution, but does not affect solutions in the non-bunched range. These are affected if bunching is caused by binding non-negative income constraints. Specific skill distributions are considered and it shown that the pattern of marginal tax rates depend critically on whether or not the skill distribution is truncated at the upper end.

PD July 1999. **TI** Inter-Jurisdictional Competition for Firms: Jobs as Vehicles for Redistribution. **AU** Boadway, Robin; Cuff, Katherine; Marceau, Nicolas. **AA** Boadway and Cuff: Queen's University. Marceau: Universite du Quebec, Montreal. **SR** Queen's Institute for Economic Research Discussion Paper: 986; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html. PG 28. PR Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. JE H21, H71, J61. KW Inter-Jurisdictional Competition. Redistributive Policies. Unemployment.

AB Regions inhabited with an immobile population of disabled and able individuals compete to attract mobile firms that provide jobs. The redistributive goal of regional governments is to support the disabled, who cannot work. Able individuals may work, be involuntary unemployed because of frictions in the labor market, or choose to be voluntary unemployed. Labor force participation decisions depend on regional redistributive policies. Both the size of workforce and tax on firms affect profits and therefore, firms' location decisions. Allowing regions to engage in tax competition may be efficient. If regions cannot tax firms, they compete by implementing inefficient redistributive policies.

Bonatti, Luigi

TI Endogenous Growth and Negative Externalities. **AU** Bartolini, Stefano; Bonatti, Luigi.

Boot, Arnoud W. A.

PD October 1999. **TI** Objectivity, Proximity and Adaptability in Corporate Governance. **AU** Boot, Arnoud W. A.; Macey, Jonathon R. **AA** Boot: Universiteit van

Amsterdam.. Macey: Cornell Law School. **SR** Centre for Economic Policy Research Discussion Paper: 2257; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 52. **PR** 5 pounds, \$8 or 8 euros. **JE** G30, K20, P50. **KW** Corporate Governance. Comparative Financial Systems.

AB Countries appear to differ considerably in the basic orientations of their corporate governance structures. This paper postulates the trade-off between objectivity and proximity as fundamental to the corporate governance debate, stressing both the value of objectivity that comes with distance (e.g. the market oriented U. S. system), and the value of better information that comes with proximity (e.g. the more intrusive Continental European model). A superior corporate governance arrangement must balance the benefits of proximity and objectivity. In this context is also discussed the ways in which investors have "contracted around" the flaws in their own corporate governance systems, pointing at the adaptability of different arrangements.

Boozer, Michael A.

PD June 2001. **TI** Inside the 'Black Box' of Project Star: Estimation of Peer Effects Using Experimental Data. **AU** Boozer, Michael A.; Cacciola, Stephen E. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 832; Economic Growth Center, Publications Office, Yale University, P.O. Box 208269, Yale Station, New Haven CT 06520-8269. Website: www.library.yale.edu/socsci/egcpage.html. **PG** 50. **PR** \$2.00 plus postage. **JE** C23, C51, C81, I21, Z13. **KW** Peer Effects. Grouped Data. Organization of Schooling. Experimental Evidence.

AB The credible identification of endogenous peer group effects -- i.e. social multiplier or feedback effects -- has long eluded social scientists. We argue that such effects are most credibly identified by a randomly assigned social program which operates at differing intensities within and between peer groups. The data we use are from Project STAR, a class size reduction experiment conducted in Tennessee elementary schools. In these data, classes were comprised of varying fractions of students who had previously been exposed to the Small class treatment, creating class groupings of varying experimentally induced quality. We use this variation in class group quality to estimate the spillover effect. We find that when allowance is made for this 'feedback' effect of prior exposure to the Small class treatment, the peer effects account for much of the total experimental effects in the later grades, and the direct class size effects are rendered substantially smaller.

Bordo, Michael D.

PD September 1999. **TI** The Future of EMU: What Does the History of Monetary Unions Tell Us? **AU** Bordo, Michael D.; Jonung, Lars. **AA** Bordo: Rutgers University and NBER. Jonung: Stockholm School of Economics. **SR** National Bureau of Economic Research Working Paper: 7365; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** \$5.00. **JE** E42, E61, F33, F42, N20. **KW** European Monetary Union. Monetary Unions. Central Banks. Economic History. Political Stability.

AB The creation of EMU and the ECB has triggered a discussion of the future of EMU. Independent observers have pointed to a number of shortcomings or "hazard areas" in the construction of EMU, such as the absence of a central lender of

last resort function for EMU, the lack of a central authority supervising the financial systems of EMU, unclear and inconsistent policy guidelines for the ECB, the absence of central coordination of fiscal policies within EMU, unduly strict criteria for domestic debt and deficits, as set out in the Maastricht rules, and Euroland as not an "optimal" currency area. Do these "flaws" represent major threats to the future of EMU? Or will they be successfully resolved by the European policy authorities, leading to a lasting and prosperous EMU? The authors provide answers to these questions by examining the historical record of monetary unions. They try to extract the key conditions for establishing and for maintaining monetary unions. The main lesson from the history of monetary unions is that political factors will be the central determinants of the future of EMU. The "economic" shortcomings of EMU will likely be overcome as long as political unity prevails within EMU.

Borghesi, Simone

PD November 1999. **TI** The Environmental Kuznets Curve: A Survey of the Literature. **AA** European University Institute. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 99/85; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 32. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C23, O57, Q25, Q32. **KW** Environmental Kuznets Curve. Growth. Pollution.

AB In the last few years, several studies have found an inverted-U relationship between per capita income and environmental degradation. This relationship, known as the environmental Kuznets curve (EKC), suggests that environmental degradation increases in the early stages of growth, but it eventually decreases as income exceeds a threshold level. The present paper reviews both early and recent contributions on this subject, discussing whether and to what extent such a curve can be empirically observed, and the policy implications that derive from the empirical evidence.

Borghini, Stefania

TI The Response of Companies to Information-Based Environmental Polices. **AU** Siniscalco, Domenico; Borghini, Stefania; Fantini, Marcella; Ranghieri, Federica.

Bortolotti, Bernardo

PD April 2000. **TI** Why do Governments Sell Privatised Companies Abroad? **AU** Bortolotti, Bernardo; Fantini, Marcella; Scarpa, Carlo. **AA** Bortolotti: Fondazione Eni Enrico Mattei. Fantini: University of Bergamo and Fondazione Eni Enrico Mattei. Scarpa: University of Brescia and Fondazione Eni Enrico Mattei. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/23; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 44. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** G15, G32, G34, K22, L33. **KW** Privatization. Cross-Listing. International Financial Markets. Political Economy. Investor Protection.

AB This paper provides an empirical analysis of Governments' decisions to sell privatized companies on both international and domestic markets in a sample of 392 privatizations in 42 countries in the 1977-1998 period. Political theories of privatization find strong support in our analyses: market oriented Governments favor domestic investors in the

allocation of shares. The need to expose the company to global competition, to penetrate foreign markets and to warrant better legal protection to shareholders also appears as relevant. Significant differences emerge in OECD and non-OECD countries. In wealthy economies stock market liquidity favors cross-listing, while in emerging countries Governments resort to cross-listing in order to "import" liquidity and to develop domestic stock markets. Legal institutions also play a different role. In OECD countries, weak shareholder protection induces Governments to cross-list, in order to borrow the reputation and best practices of established exchanges. On the other hand, creditors' protection is more relevant in non-OECD countries, where weak legal protection of creditors reduces the scope of bank finance, forcing Governments to look for funds abroad.

Bossert, Charles

TI The Axiomatic Approach to Population Ethics.
AU Blackorby, Charles; Bossert, Charles; Donaldson, David.

Bottazzi, Laura

PD October 1999. **TI** Innovation, Demand and Knowledge Spillovers: Theory and Evidence >From European Regions. **AU** Bottazzi, Laura; Peri, Giovanni. **AA** Bottazzi:Universita Bocconi. Peri: University of California, Berkeley. **SR** Centre for Economic Policy Research Discussion Paper: 2279; CEPR, 90- 98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 60. **PR** 5 pounds, \$8 or 8 euros. **JE** O30, R10. **KW** R&D. Regional. Spatial Spillovers. Endogenous Innovation.

AB The importance of innovation for the economic performance of industrialized countries has been largely stressed recently by the theoretical and empirical literature. Very few studies have carefully considered the determinants of European innovation, the productivity of its R&D and the existence of knowledge spillovers across regional boundaries. This paper develops a model which, emphasizing "the demand pull" as a key exogenous determinant of long-run innovation across regions, allows the researcher to estimate the returns to regional R&D as a generator of innovation. The findings are that most of the cross- regional differences in innovation rates can be explained by their own R&D, even after correcting for the endogeneity bias. Moreover, significant spillovers are found among geographically close regions, especially if they are technologically similar.

Bouet, Antoine

PD November 2000. **TI** La mesure des protections commerciales nationales (Measuring the Level of Trade Protection). **AA** University of Pau. **SR** CEPII Working Paper: 2000/15; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 50. **PR** no charge. **JE** F12. **KW** Trade Policy. International Trade Negotiations. Gravity Equations. Computable General Equilibrium.

AB This paper is a survey of the evaluation of protection levels in European Union and its main trading partners. It gives a survey of the measurement of national protections' intensity and an evaluation of current trade policies, by country and by sector. In spite of international agreements, national governments use heterogenous trade instruments (quantitative and price control instruments), imposed on different bases

(imports, exports, production, Research & Development, etc.). Other problems are difficult to solve: weighting taxes on different products for example. Recent studies circumvent these difficulties by using a computable general equilibrium model (Trade Restrictiveness Index), a method which appears to be the most interesting one. On the second point, studies show that barriers to trade are now mostly ad valorem tariffs. Secondly, globalization is not finished as many sectors are still highly-protected, especially in developing countries. In OECD countries, only agricultural, textile and clothing sectors are still highly-protected. European barriers to trade are similar to the protection of EU's main partners. Paper available in French only.

Bovenberg, A. Lans

PD July 2000. **TI** Neutralizing the Adverse Industry Impacts of CO2 Abatement Policies: What Does It Cost? **AU** Bovenberg, A. Lans; Goulder, Lawrence H. **AA** Bovenberg: Tilburg University. Goulder: Stanford University, Resources for the Future and NBER. **SR** Resources for the Future Discussion Paper: 00/27; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 49. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D58, H21, H22, H25, L51. **KW** Climate Policy. Distributional Impacts. General Equilibrium. Environmental Regulation. Energy.

AB The most cost-effective policies for achieving CO2 abatement (e.g., carbon taxes) are considered politically unacceptable because of distributional consequences. This paper explores policies designed to address distributional concerns. Using an intertemporal, numerical general equilibrium model of the United States, the authors examine how efficiency costs change when CO2 abatement policies include elements that neutralize adverse impacts on energy industries. They find that desirable distributional outcomes can be achieved at relatively low cost in terms of efficiency. Without substantial added cost to the overall economy, the government can implement carbon abatement policies that protect profits and equity values in fossil-fuel industries. Each of these government policies involves only a small sacrifice of potential government revenue. Because these policies give up little of this potential revenue, they involve only a small sacrifice in terms of efficiency. The authors also find that there is a very large difference between preserving firms' profits and preserving their tax payments. Allowing firms to enjoy a dollar-for-dollar offset to their payments of carbon taxes substantially overcompensates firms.

Boyd, James

TI Tailored Regulation: Will Voluntary Site-Specific Environmental Performance Standards Improve Welfare? **AU** Blackman, Allen; Boyd, James.

PD April 1999. **TI** The Law and Economics of Habitat Conservation: Lessons from an Analysis of Easement Acquisitions. **AU** Boyd, James; Caballero, Kathryn; Simpson, R. David. **AA** Boyd and Simpson: Resources for the Future. Caballero: New York University. **SR** Resources for the Future Discussion Paper: 99/32; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 42. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** K11, Q15, Q24, Q28, R52. **KW** Habitat Conservation. Conservation

Easements. Land Use Policy. Environmental Policy.

AB There is a growing interest in incentive-based policies to motivate conservation by landowners. These policies include full- and partial- interest land purchases, tax-based incentives, and tradable or bankable development rights. Using legal and economic analysis, the paper explores potential pitfalls associated with the use of such policies. Incentive-based policies promise to improve the cost effectiveness of habitat preservation, but only if long-run implementation issues are meaningfully addressed. While we compare conservation policies, particular attention is devoted to the use of conservation easements and in particular a set of easement contracts and transactions in the state of Florida. The easement analysis highlights the importance of conservation policies' interactions with property markets, land management practices, and bureaucratic incentives. Specific challenges include difficulties associated with the long-term enforcement and monitoring of land use restrictions, the lack of market prices as indicators of value for appraisal, and the way in which incentives target specific properties for protection.

Braga de Macedo, Jorge

PD October 1999. **TI** Moving the Escudo into the Euro. **AU** Braga de Macedo, Jorge; Covas, Francisco; Nunes, Luis Catela. **AA** Universidade Nova de Lisboa. **SR** Centre for Economic Policy Research Discussion Paper: 2248; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** C22, F31, F33. **KW** Regime Switching. Portugal. Economic and Monetary Union (EMU).

AB This paper studies the changes in the Portuguese economy from an inflationary 1987 through a stable present. The understanding by the Portuguese authorities of the ERM code of conduct as they prepared to join after the 1991 general elections made it possible to acquire financial reputation very quickly. But the enhanced national credibility abroad caused tension within several minister/governor pairs, especially with respect to the timing of ERM entry, the speed at which to move to full currency convertibility and whether the escudo should respond to peseta realignments. The weekly escudo-DMark rate reveals widely different volatility states which were accompanied by six successive exchange rate regimes. Before entering the ERM, a crawling peg was discreetly replaced by DMark shadowing with reinforced controls on capital inflows at the beginning of first stage of EMU. Yet, the escudo- DMark rate was more stable in the ERM than when it was inconvertible and the central bank controlled the currency. Markov switching autoregressive conditional heteroskedasticity (SWARCH) models with more than three states capture all regimes. The specification with five states is favored because it suggests the nature of the response of the central bank to speculative attacks during the crises regime.

Brana, Sophie

TI Barter in Russia: Liquidity Shortage Versus Lack of Restructuring. **AU** Maurel, Mathilde; Brana, Sophie.

Branco, Fernando

PD October 1999. **TI** Procurement Favouritism and Technology Adoption. **AA** Universidade Catolica Portuguesa. **SR** Centre for Economic Policy Research Discussion Paper: 2270; CEPR, 90- 98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org.

PG 40. **PR** 5 pounds, \$8 or 8 euros. **JE** D44, F13, H57, O33. **KW** Procurement. Protection. Technology Adoption. Auctions.

AB The design of cost minimizing procurement rules for the selection of contractors among distinct technological groups requires the favoritism of inefficient firms. It is unclear whether these policies provide incentives for inefficient firms to adopt more efficient technologies. In this paper the inefficient firm may adopt the efficient technology at some cost. Government policy can be effective for an intermediate range of adoption costs. To induce adoption, the government should commit to favor the (initially) inefficient firm, despite both firms eventually having the same technology. Even with limited government commitment, optimal favoritism provides more incentives for technology adoption than a symmetric mechanism.

Brennan, Timothy J.

PD January 2000. **TI** The Economics of Competition Policy: Recent Developments and Cautionary Notes in Antitrust and Regulation. **AA** University of Maryland-Baltimore County and Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/07; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 25. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** C72, G34, L41, L42, L51. **KW** Antitrust. Regulation. Competition Policy. Game Theory. Vertical Restraints.

AB Competition policy has become more prominent while the thinking underlying those policies has undergone substantial revision. We survey advances in antitrust economics and the economics of regulation. Increasing reliance on non-cooperative game theory as a foundation for antitrust has led to rethinking conventional approaches. We review some of these contributions in the context of mergers, vertical restraints, and competition in "network industries." Turning to regulation, we review standard rationales and identify some major contemporary refinements, with examples of the motives behind them and their application. After brief thoughts on privatization, we conclude with suggestions on design and implementation, with some observations on whether these developments are as valuable in the corridors of policy as they may be in the halls of academe.

TI Enforcing Environmental Regulation: Implications of Remote Sensing Technology. **AU** Macauley, Molly K.; Brennan, Timothy J.

PD October 1998. **TI** Demand-Side Management Programs Under Retail Electricity Competition. **AA** Resources for the Future and University of Maryland-Baltimore County. **SR** Resources for the Future Discussion Paper: 99/02; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 18. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** L51, L94, Q41, Q48. **KW** Electricity Restructuring. Energy Conservation. Regulatory Policy. Demand-Side Management. Deregulation.

AB Demand-side management programs comprise subsidies from franchised electric utilities for the purchase of high-efficiency appliances, e.g., air conditioners. Competition in power generation threatens the viability of these programs. However, it should also reduce the warrant for them. Under regulation, the justification for such programs depends,

somewhat paradoxically, on below marginal-cost pricing. Eliminating regulation should permit pricing flexibility to discourage excessive on-peak energy use. It should also eliminate the assurance of returns that may have encouraged overbuilding of generation capacity. Entrants and incumbent utilities should find it easier to offer "energy services," i.e., to bundle electricity with appliances, if consumers are too myopic to realize the benefits of increasing energy efficiency. Environmental degradation remains a problem, but competition can improve the performance of incentive-based regulations (e.g., permit trades), reducing the value of DSM as a supplemental, second-best alternative.

PD May 1999. **TI** Do Lower Prices for Polluting Goods Make Environmental Externalities Worse? **AA** University of Maryland, Baltimore County and Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/40; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 23. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** L51, L94, Q28, Q41, Q48. **KW** Environmental Policy. Regulatory Policy. Externalities. Electricity Restructuring. Air Pollution. **AB** Lower prices for polluting goods will increase sales and pollution that results from their production or use. This suggests a stronger case for environmental controls when prices of "dirty" goods fall. But the inefficiency resulting from overproduction of polluting goods may fall, not rise, as the cost of producing those goods falls. While lower costs exacerbate overproduction, they also reduce the difference between private benefit and the total social cost associated with that overproduction. The author of this paper derives a test, based on readily observed or estimated parameters, for when the latter effect outweighs the former. This test, with minor modifications, can be applied where the dirty good market is not competitive, demand rather than supply drives the increase in output, and abatement can reduce pollution. The analysis speaks to whether stricter air pollution regulations should accompany policies to reduce electricity costs by making power generation more competitive.

Brixiova, Zuzana

PD July 2001. **TI** The Gender Gap in Education in Eritrea in 1991-98: A Missed Opportunity? **AU** Brixiova, Zuzana; Bulir, Ales; Comenetz, Joshua. **AA** Brixiova and Bulir: International Monetary Fund. Comenetz: University of Florida. **SR** International Monetary Fund Working Paper: WP/01/94; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 22. **PR** \$10.00. **JE** I28, I39, J71. **KW** Gender Gap. Education. Growth. Poverty Reduction. **AB** This paper shows that during the 1990s, and before the 1998-2000 border war with Eritrea, the gender gap in education in Eritrea has widened on the national level, and large regional disparities have persisted. The gender gap appears to be linked to lower female teacher participation and limited employment opportunities. The widening of the gender gap is likely to have a long-term negative impact on both economic growth and poverty reduction.

Brocas, Isabelle

TI On Rush and Procrastination. **AU** Carrillo, Juan D.; Brocas, Isabelle

Brown, Donald J.

PD December 2000. **TI** Weighted Minimum Mean-Square Distance from Independence Estimation. **AU** Brown, Donald J.; Wegkamp, Marten H. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1288; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. **PG** 31. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** C14, C30. **KW** Semiparametric Estimation. Simultaneous Equations. Empirical Processes. Extremum Estimators. **AB** In this paper we introduce a family of semi-parametric estimators, suggested by Manski's minimum mean-square distance from independence estimator. We establish the strong consistency, asymptotic normality and consistency of bootstrap estimates of the sampling distribution and the asymptotic variance of these estimators.

Browning, Martin

TI Nonparametric Engel Curves and Revealed Preference. **AU** Blundell, Richard; Browning, Martin; Crawford, Ian A.

Broze, Laurence

PD June 2000. **TI** Non Redundancy of High Order Moment Conditions for Efficient GMM Estimation of Weak AR Processes. **AU** Broze, Laurence; Francq, Christian; Zakoian, Jean-Michel. **AA** Broze: Universite de Lille 3, France and CORE. Francq: Universite du Littoral-Cote d'Opale, France. Zakoian: Universite de Lille 3 and CREST. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/33; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 7. **PR** \$100 per year. **JE** C13, C22. **KW** Autoregressive Processes. Efficiency Gains. GMM. Empirical Autocorrelations. Yule-Walker Estimator. **AB** This paper considers GMM estimation of autoregressive processes. It is shown that, contrary to the case where the noise is independent (see Kim, Qian and Schmidt (1999)), using high-order moments can provide substantial efficiency gains for estimating the AR(p) model when the noise is only uncorrelated.

Brunello, Giorgio

PD April 2000. **TI** Education and Earnings Growth. Evidence from 11 European Countries. **AU** Brunello, Giorgio; Comi, Simona. **AA** Brunello: University of Padova and IZA Bonn. Comi: Fondazione Eni Enrico Mattei. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/29; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 23. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** J21, J31, J33. **KW** Education. Earnings Growth. Europe.

AB We use cohort data from 11 European countries to study whether experience profiles differ by educational attainment. Previous literature does not provide a clear answer to this question, that is important to evaluate private returns to education over the working life of individuals. We find evidence that employees with tertiary education have steeper experience profiles than employees with upper secondary or compulsory education. Hence, education provides not only an initial labor market advantage but also a permanent advantage

that increases with time in the labor market. We also find that differences in earnings growth by education are lower in countries with a higher level of corporatism and higher in countries which have experienced both relatively fast labor productivity growth and a relatively low educational attainment. The educational system also seems to matter, because countries with a more stratified system of secondary education have smaller differences in earnings growth by education.

PD December 1999. **TI** The Returns to Education in Italy: A New Look at the Evidence. **AU** Brunello, Giorgio; Comi, Simona; Lucifora, Claudio. **AA** Brunello: University of Padua, Fondazione Eni Enrico Mattei and IZA. Comi: Fondazione Eni Enrico Mattei. Lucifora: Catholic University of Piacenza and Fondazione Eni Enrico Mattei. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 99/101; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it **PG** 42. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** I21, I22, J24, J31. **KW** Education. Earnings. Italy.

AB The purpose of this paper is to provide an update of the empirical evidence on the private returns to education in Italy. First, we show that, whilst returns to education in Italy (based on gross wages) are in line with the European average, educational attainment is generally much lower (particularly at secondary and tertiary levels). How can we reconcile these findings? Based on a simple human capital model -- where the optimal level of schooling is given by equating the marginal return to the marginal cost of education -- we speculate that either marginal costs are steeper in Italy or that a larger share of the population involved in human capital investment faces high marginal costs in Italy compared to the European average. Second, we examine whether the estimated returns to education have varied significantly over time.

Bulir, Ales

TI The Gender Gap in Education in Eritrea in 1991-98: A Missed Opportunity? **AU** Brixiova, Zuzana; Bulir, Ales; Comenetz, Joshua.

Burnside, Craig

PD February 2000. **TI** On the Fundamentals of Self-Fulfilling Speculative Attacks. **AU** Burnside, Craig; Eichenbaum, Martin; Rebelo, Sergio T. **AA** Burnside: World Bank. Eichenbaum and Rebelo: Northwestern University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7554; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 28. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside US). **JE** F31, F41, G15, G21. **KW** Foreign Exchange. Banking. **AB** This paper proposes a theory of twin banking-currency crises in which both fundamentals and self-fulfilling beliefs play crucial roles. Fundamentals determine whether crises will occur. Self-fulfilling beliefs determine when they occur. The fundamental that causes "twin crises" is government guarantees to domestic banks' foreign creditors. When these guarantees are in place twin crises inevitably occur, but their timing is a multiple equilibrium phenomenon that depends on agents' beliefs. So while self-fulfilling beliefs have an important role to play, twin crises do not happen just anywhere. They happen in countries where there are fundamental problems - problems such as guarantees to the financial sector.

Burtraw, Dallas

TI Sulfur Dioxide Control by Electric Utilities: What Are the Gains from Trade? **AU** Carlson, Curtis; Burtraw, Dallas; Cropper, Maureen; Palmer, Karen.

PD April 2000. **TI** Heterogeneity in Costs and Second-Best Policies for Environmental Protection. **AU** Burtraw, Dallas; Cannon, Matt. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/20; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 31. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D58, H21, L51, Q28. **KW** Cost-Effectiveness. General Equilibrium. Environmental Policy. Instrument Choice. Second-Best Regulation.

AB This paper investigates heterogeneity in pollution abatement costs using a computable general equilibrium framework. Previous literature using aggregated data has found that "grandfathered" tradable permits are dominated by other instruments including emission taxes, performance standards, and technology mandates because of interactions with pre-existing taxes. However, when the underlying costs of abatement are heterogeneous, a disaggregate representation of costs yields qualitatively different findings. In a disaggregate model of NOx abatement in the United States, the relative performance of tradable permits improves significantly and out-performs command and control approaches over a wide range of emission reductions.

TI State-Level Policies and Regulatory Guidance for Compliance in the Early Years of the SO2 Emission Allowance Trading Program. **AU** Lile, Ronald; Burtraw, Dallas.

TI The Benefits of Air Pollutant Emissions Reductions in Maryland: Results from the Maryland Externalities Screening and Valuation Model. **AU** Austin, David; Krupnick, Alan; Burtraw, Dallas; Stoessel, Terrell.

PD March 1999. **TI** The Effects of Trading and Banking in the SO2 Allowance Market. **AU** Burtraw, Dallas; Mansur, Erin. **AA** Burtraw: Resources for the Future. Mansur: University of California, Berkeley. **SR** Resources for the Future Discussion Paper: 99/25; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 25. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D62, H43, Q25, Q28, Q48. **KW** Acid Rain. Sulfur Dioxide. Allowance Trading. Cost-Benefit Analysis. Clean Air Act.

AB The innovation of Title IV of the 1990 Clean Air Act Amendments is sulfur dioxide allowance trading, which is designed to encourage the electricity industry to minimize the cost of reducing emissions. We exercise an integrated assessment computer model to evaluate changes in emissions of SO2, atmospheric concentrations of sulfates and deposition of sulfur, and public health benefits from reduced exposure to SO2 and particulate matter. We assess geographic and temporal changes at the state level that result from trading and banking. Our findings are not consistent with the fears of the program's critics. In the East and Northeast including New York State, an area of particular concern, we find health benefits increase and sulfur deposition decrease slightly as a result of trading. Nationally, trading results in health related benefits in addition to significant cost savings. Banking changes the timing of emissions, but the geographic consequence of banking is varied.

TI Winner, Loser, or Innocent Victim? Has Renewable Energy Performed as Expected? **AU** McVeigh, James; Burtraw, Dallas; Darmstadter, Joel; Palmer, Karen.

PD April 1999. **TI** Measuring the Value of Health Improvements from Great Lakes Cleanup. **AU** Burtraw, Dallas; Krupnick, Alan. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/34; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 25. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** I12, Q25, Q28. **KW** Great Lakes. Health. Cost-Benefit Analysis. Pollution.

AB Exposure to pollutants in the Great Lakes Region can have significant effects on human health. Some forms of pollution affect humans directly, through the air we breathe and water we drink. Other forms of pollution affect humans indirectly, for example through consumption of contaminated fish. In this paper the authors describe methods to measure health benefits in monetary and nonmonetary terms in the context of reductions in pollutants as part of a program to improve the environment in the Great Lakes. The paper is meant to be an introduction to this topic for a general audience interested in the Great Lakes.

PD September 1999. **TI** Ancillary Benefits of Reduced Air Pollution in the U.S. from Moderate Greenhouse Gas Mitigation Policies in the Electricity Sector. **AU** Burtraw, Dallas; Krupnick, Alan; Palmer, Karen; Paul, Anthony; Toman, Michael; Bloyd, Cary. **AA** Bloyd: Argonne National Laboratory. Burtraw, Krupnick, Palmer, Paul, and Toman: Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/51; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 22. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** H23, I12, I18, Q25, Q48. **KW** Climate Change. Greenhouse Gases. Ancillary Benefits. Air Pollution. Environmental Regulation.

AB Actions to slow atmospheric accumulation of greenhouse gases from fossil fuel use could also reduce conventional air pollutants. We analyze changes in nitrogen oxides (NOx) from carbon policies in the electricity sector. Emission changes are fed through an atmospheric transport and health model to predict changes in health status, and to characterize these changes in monetary terms. We find a tax of \$25 per metric ton of carbon emissions would yield Nox related health benefits of about \$8 per metric ton of carbon reduced in the year 2010 (1997 dollars). Additional savings accrue from reduced investment in NOx and SO2 abatement. These savings sum to \$4-\$7 per ton of carbon reduced. Total ancillary benefits of a \$25 carbon tax are estimated to be \$13- \$14. Marginal ancillary benefits are approximately constant over the range of policies we examine when viewed as benefits per ton carbon reduced.

Bussoli, Patrizia

PD January 2000. **TI** An Empirical Analysis of Technological Convergence Process and R&D in Europe at the Firm Level. **AA** Deutsch Bank London and Universitat Pompeu Fabra Barcelona. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/12; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 36. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** O12, O32. **KW** Technological Convergence. Microeconomics of

Economic Growth. R&D. Technological Diffusion. Spillovers. **AB** We use a new data set for European manufacturing firms to assess whether a short term technological convergence process has been taking place among manufacturing firms in seven European countries. The empirical analysis aims to study the effects of international co-operative R&D on short term productivity gains among European manufacturing firms and to clarify the role of spillovers in the process of technological diffusion. We find substantial evidence of convergence across firms in Europe, that the overall convergence process is influenced by the presence of international R&D co-operation and that symmetric Research Joint Ventures (RJVs) increase productivity to a greater extent than RJVs between asymmetric firms. The convergence process is affected by the presence of RJVs, but in this analysis we do not detect that convergence is positively affected by country and sectoral trade and patents.

Caballero, Kathryn

TI The Law and Economics of Habitat Conservation: Lessons from an Analysis of Easement Acquisitions. **AU** Boyd, James; Caballero, Kathryn; Simpson, R. David.

Cacciola, Stephen E.

TI Inside the 'Black Box' of Project Star: Estimation of Peer Effects Using Experimental Data. **AU** Boozer, Michael A.; Cacciola, Stephen E.

Cadiou, Loic

TI Consumption Habit and Equity Premium in the G7 Countries. **AU** Allais, Olivier; Cadiou, Loic; Dees, Stephane.

PD December 2000. **TI** A Computational General Equilibrium Model with Vintage Capital. **AU** Cadiou, Loic; Dees, Stephane; Laffargue, Jean-Pierre. **AA** Cadiou and Dees: CEPII. Laffargue: CEPREMAP (Centre d'Etudes Prospectives d'Economie Mathematique Appliquees a la Planification). **SR** CEPII Working Paper: 2000/20; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 29. **PR** no charge. **JE** C63, C68, E22. **KW** Vintage Capital Models. Replacement Echoes. Dynamic Model Solving. Medium-Term Dynamics.

AB This paper presents a vintage capital model assuming putty-clay investment and perfect foresight. The model is written in discrete time and is simulated by using a second order relaxation algorithm. By computing the eigenvalues of the dynamic system, we have first checked the conditions of existence and uniqueness of a solution (Blanchard and Khan's conditions) and identified the echo effect that characterizes vintage capital models and the related dynamics of creation and destruction. By calibrating the model on French data, it has been proved useful to explain the medium-term movements in the distribution of income in France during the last three decades.

TI Defining Consumption Behavior in a Multi-Country Model. **AU** Allais, Olivier; Cadiou, Loic; Dees, Stephane.

PD December 2001. **TI** Marmotte: A Multinational Model. **AU** Cadiou, Loic; Dees, Stephane; Guichard, Stephanie; Kadareja, Arjan; Laffargue, Jean-Pierre; Rzepkowski, Bronka. **AA** CEPII. **SR** CEPII Working Paper: 2001/15; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 166. **PR** no charge.

JE C51, C68, E10, D58. **KW** Dynamic General Equilibrium Model. Perfect Foresight. Putty-Clay Technology. Macroeconometric Modelling.

AB Marmotte is an annual multinational model of 17 OECD countries focussing on the medium term. Each country is modelled by a system of about 50 equations. This rational expectations model has strong microeconomic foundations as most of the behavioural equations result from inter-temporal optimisation. Due to these characteristics, the simulation results are easy to interpret. This model is currently used under the framework of a European network (EFN) to investigate the international transmission of shocks as well as to analyze the consequences of economic policy in the euro area.

Cahill, Sarah

TI Environmental Implications of the Tourism Industry.
AU Davies, Terry; Cahill, Sarah.

Cai, T.

PD November 2000. **TI** Mixed Model-Based Hazard Estimation. **AU** Cai, T.; Hyndman, Rob J.; Wand, M. P. **AA** Cai: University of Washington. Hyndman: Monash University. Wand: Harvard University. **SR** Monash Department of Econometrics and Business Statistics Working Paper: 00/11; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/. **PG** 14. **PR** no charge. **JE** C14, C24. **KW** Non-Parametric Regression. Restricted Maximum Likelihood. Variance Component. Survival Analysis.

AB We propose a new method for estimation of the hazard function from a set of censored failure time data, with a view to extending the general approach to more complicated models. The approach is based on a mixed model representation of penalized spline hazard estimators. One payoff is the automation of the smoothing parameter choice through restricted maximum likelihood. Another is the option to use standard mixed model software for automatic hazard estimation.

Calcott, Paul

PD June 2000. **TI** Policies to Encourage Recycling and "Design for Environment": What to Do When Markets are Missing. **AU** Calcott, Paul; Walls, Margaret. **AA** Calcott: Victoria University. Walls: Victoria University and Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/30; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 17. **PR** Foreign: \$15.00 Air Mail: \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** H21, H23, Q28. **KW** Solid Waste. Regulation. Regulatory Design. Environmental Policy. Recycling.

AB Several studies have shown the efficiency of both a Pigovian tax on waste disposal and a deposit-refund instrument, that is a combined output tax and recycling subsidy. The efficiency of these instruments, however, critically depends on households being paid for recycling. In reality, although most households have access to curbside recycling services, they are not paid for the items they set out at the curb. All items placed in a recycling bin are thus of equal value to a household, and there is no incentive for producers to make their products any more recyclable than what is necessary to be eligible for the bin. This paper characterizes the constrained (second-best)

optimum that exists with the missing recycling market and solves for a modified deposit-refund instrument that will achieve the constrained optimum.

Calderon, Cesar

PD June 2001. **TI** Productivity in the OECD Countries: A Critical Appraisal of the Evidence. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/89; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 19. **PR** \$10.00. **JE** O47, O52. **KW** Economic Growth. Total Factor Productivity (TFP). Cross-Country Productivity Differentials.

AB The failure of the neoclassical growth model to account for differences in output per worker across countries has suggested that these differences should be driven by cross-country differences in total factor productivity (TFP). This paper discusses various measures of productivity and its determinants for the OECD countries from different dimensions: (i) the measurement perspective; (ii) evidence on the evolution of productivity levels across OECD countries; and (iii) a critical review of the theoretical and empirical issues regarding the determinants of cross-country productivity differentials.

Calmette, Marie-Francoise

TI Domestic Competition and Export Performance of Manufacturing Firms in Cote d'Ivoire. **AU** Azam, Jean-Paul; Calmette, Marie-Francoise; Loustalan, Catherine; Maurel, Christine.

Calzolari, Giacomo

PD January 2000. **TI** Hormone Beefs, Chloridric Chicken and International Trade: Can Scientific Uncertainty be an Informational Barrier to Trade? **AU** Calzolari, Giacomo; Immordino, Giovanni. **AA** Calzolari: Universite de Toulouse and University of Bologna. Immordino: Universite de Toulouse and University of Palermo. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/10; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 35. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D81, D83, F12, L13. **KW** International Trade. Lobbies. Information. Scientific Uncertainty.

AB We study international trade of innovative goods subject to scientific uncertainty on consumers' health effects. Trade of these goods is often at the center of international disputes. We show that a new trade protectionism may arise because of the scientific uncertainty. A free riding effect is individuated implying a more conservative behavior by countries. We also study the informative role played by producers' lobbies in revealing valuable information. We find that producers reveal more information when the effects of harmful consumption on health are long lasting. Our results are robust to several extensions (e.g. product labeling, firm liability).

PD November 1999. **TI** Non-Intrinsic Common Agency. **AU** Calzolari, Giacomo; Scarpa, Carlo. **AA** Calzolari: GREMAQ, Universite des Sciences Sociales de Toulouse, France and University of Bologna, Italy. Scarpa: University of Bologna, Italy. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 99/84; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 17. **PR** 10 papers minimum order at \$4.00 each; annual

subscription at \$250.00. **JE** D82, L14, L41. **KW** Agency Model. Common Agency. Non Intrinsic.

AB In this paper we analyze a common agency model in which agents can choose with how many principals they want to work, while principals cannot condition contracts on the agent's decision to accept other contracts. In this case of "non-intrinsic" common agency we characterize the equilibrium. Unless the substitutability between the two outputs is very strong, optimality conditions for principals' contracts are the same as with intrinsic common agency. However, principals suffer from reciprocal competition, which with "moderate" substitutability increases the informational rent agents obtain in equilibrium.

Campbell, John Y.

PD March 2000. **TI** Asset Pricing at the Millennium. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7589; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 54. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** G12. **KW** Asset Pricing.

AB This paper surveys the field of asset pricing. The emphasis is on the interplay between theory and empirical work, and on the tradeoff between risk and return. Modern research seeks to understand the behavior of the stochastic discount factor (SDF) that prices all assets in the economy. The behavior of the term structure of real interest rates restricts the conditional mean of the SDF, while patterns of risk premia restrict its conditional volatility and factor structure. Stylized facts about interest rates, aggregate stock prices, and cross-sectional patterns in stock returns have stimulated new research on optimal portfolio choice, intertemporal equilibrium models, and behavioral finance.

PD March 2000. **TI** Have Individual Stocks Become More Volatile? An Empirical Exploration of Idiosyncratic Risk. **AU** Campbell, John Y.; Lettau, Martin; Malkiel, Burton G.; Xu, Yexiao. **AA** Campbell: Harvard University and National Bureau of Economic Research. Lettau: Federal Reserve Bank of New York and CEPR. Malkiel: Princeton University. Xu: University of Texas at Dallas. **SR** National Bureau of Economic Research Working Paper: 7590; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 36. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** E32, G10. **KW** Financial Markets. Business Cycles.

AB This paper uses a disaggregated approach to study the volatility of common stocks at the market, industry, and firm levels. Over the period 1962-97 there has been a noticeable increase in firm-level volatility relative to market volatility. Accordingly, correlations among individual stocks and the explanatory power of the market model for a typical stock have declined, while the number of stocks needed to achieve a given level of diversification has increased. All the volatility measures move together countercyclically and help to predict GDP growth. Market volatility tends to lead the other volatility series. Factors that may be responsible for these findings are suggested.

PD March 2001. **TI** Valuation Ratios and the Long-Run Stock Market Outlook: An Update. **AU** Campbell, John Y.; Shiller, Robert J. **AA** Campbell: Harvard University. Shiller:

Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1295; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. **PG** 31. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International.

JE C53, G12. **KW** Stock Markets. Price-Earnings Ratio. Forecasting. Dividend-Price Ratio. Efficient Markets.

AB The use of price-earnings ratios and dividend-price ratios as forecasting variables for the stock market is examined using aggregate annual US data 1871 to 2000 and aggregate quarterly data for twelve countries since 1970. Various simple efficient-markets models of financial markets imply that these ratios should be useful in forecasting future dividend growth, future earnings growth, or future productivity growth. We conclude that, overall, the ratios do poorly in forecasting any of these. Rather, the ratios appear to be useful primarily in forecasting future stock price changes, contrary to the simple efficient-markets models. This paper is an update of our earlier paper (1998), to take account of the remarkable behavior of the stock market in the closing years of the twentieth century.

Cannon, Matt

TI Heterogeneity in Costs and Second-Best Policies for Environmental Protection. **AU** Burtraw, Dallas; Cannon, Matt.

TI The Chesapeake Bay and the Control of Nox Emissions: A Policy Analysis. **AU** Krupnick, Alan; McConnell, Virginia D.; Austin, David; Cannon, Matt; Stoessel, Terrell; Morton, Brian.

TI The Chesapeake Bay and the Control of Nox Emissions: A Policy Analysis. **AU** Krupnick, Alan; McConnell, Virginia D.; Austin, David; Cannon, Matt; Stoessel, Terrell; Morton, Brian.

Cantillon, Estelle

TI Investment Incentives in Procurement Auctions. **AU** Arozamena, Leandro; Cantillon, Estelle.

PD October 2000. **TI** The Effect of Bidders' Asymmetries on Expected Revenue in Auctions. **AA** Yale University and Harvard Business School. **SR** Yale Cowles Foundation Discussion Paper: 1279; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. **PG** 37. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** D44, L13. **KW** Auctions. Anonymous Mechanisms. Asymmetric Valuations. Reduced Competition.

AB Bidders' asymmetries are widespread in auction markets. Yet, their impact on behavior and, ultimately, revenue and profits is still not well understood. In this paper, I define a natural benchmark auction environment to which to compare any private value auction with asymmetrically distributed valuations. I show that the expected revenue from the benchmark auction always dominates that from the asymmetric auction, both in the first price auction and the second price auction. These results formalize and make transparent the idea that competition is reduced by bidders' asymmetries. The paper also contributes to a better understanding of competition and the nature of rents in auction markets. Anonymity of the allocation mechanism seems to be an important factor.

PD November 2000. **TI** A Graphical Analysis of Some Basic Results in Social Choice. **AU** Cantillon, Estelle:

Rangel, Antonio. AA Cantillon: Yale University. Rangel: Stanford University and NBER. SR Yale Cowles Foundation Discussion Paper: 1285; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. PG 30. PR no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. JE D71. KW Graphical Analysis. Cube. Impossibility Theorem. Majority Rule. Anonymity.

AB We use a simple graphical approach to represent Social Welfare Functions that satisfy Independence of Irrelevant Alternatives and Anonymity. This approach allows us to provide simple and illustrative proofs of May's Theorem, of variants of classic impossibility results, and of a recent result on the robustness of Majority Rule due to Maskin (1995). In each case, geometry provides new insights on the working and interplay of the axioms, and suggests new results including a new characteristics of the entire class of Majority Rule SWFs, a strengthening of May's Theorem, and a new version of Maskin's Theorem.

PD December 2000. TI Electoral Rules and the Emergence of New Issue Dimensions. AA Yale University, Harvard Business School and CEPR. SR Yale Cowles Foundation Discussion Paper: 1291; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. PG 37. PR no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. JE D72, D78. KW Electoral Rules. New Issues. Electoral Competition. Entry Realignment. Party System Change.

AB Different electoral rules provide different incentives for parties competing for votes to adopt emerging issues. As a result, new societal issues will be integrated at different speeds into the political arena, and ultimately, into policy. In order to study this question formally, I propose an extension of the standard spatial model of political competition that allows for issue adoption and more generally, issue prioritizing at the platform level. The paper then compares the outcome of party competition under proportional and plurality rule. Entry is allowed and incumbent parties act as Stackelberg leaders vis-a-vis potential entrants. The analysis highlights the interaction between entry barriers and the type of emerging issue in determining when and how a new issue will be introduced. The theory explains both internal (that is, without entry by a new party) realignments of party systems along new dimensions and entry as part of the process of political realignment.

Cao, Melanie

PD February 1999. TI Screening, Bidding, and the Loan Market Tightness. AU Cao, Melanie; Shi, Shouyong. AA Cao: Queen's University. Shi: Queen's University and Universite du Quebec, Montreal. SR Queen's Institute for Economic Research Discussion Paper: 989; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html.

PG 41. PR Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. JE D44, G21, L15. KW Screening. Bidding. Loans. Informational Externality.

AB Bank loans are more available and cheaper for new and small businesses in the U.S. in areas with highly concentrated banks than in areas with highly competitive banks. We explain this fact by analyzing banks' decisions to screen risky projects

and their subsequent competition in loan provisions. It is shown that, by increasing a negative informational externality to an informed winner, an increase in the number of banks in the market can reduce banks' screening probability sufficiently, reduce the number of banks that actively compete in loan provisions and increase the expected loan rate. Policy implications are examined.

PD July 1999. TI Publicity and the Clustering of IPO Underpricing. AU Cao, Melanie; Shi, Shouyong. AA Cao: Queen's University. Shi: Queen's University and Universite du Quebec, Montreal. SR Queen's Institute for Economic Research Discussion Paper: 990; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html.

PG 30. PR Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. JE D82, G32, G33. KW Initial Public Offering. Signalling. Externality. Multiple Equilibria.

AB We explain why underpricing in IPO's can be large in magnitude and clustered, using a signalling model where firms have private information about their qualities (high or low). A novel feature is that a firm, if perceived by the market as high quality, benefits from the industry's publicity which is an increasing function of the amount of IPO underpricing by all high-quality firms in the industry. Despite the potential free-rider problem created by the industry's publicity, we show that a high-quality firm chooses to underprice its own IPO as the best response to other high-quality firms' underpricing. Thus, IPO underpricing is clustered.

Cappelli, Peter

PD October 1999. TI Do "High Performance" Work Practices Improve Establishment-Level Outcomes? AU Cappelli, Peter; Neumark, David. AA Cappelli: University of Pennsylvania. Neumark: Michigan State University and NBER. SR National Bureau of Economic Research Working Paper: 7374; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 40. PR \$5.00. JE J24, J31, J50, M11, M12. KW Work Practices. Personnel Management. Labor Productivity. High Performance. Competitiveness.

AB A number of methodological problems have confronted previous attempts to examine the relationship between work practices and the performance of firms. Among the most intractable has been a concern about establishing causation given heterogeneity biases in what have typically been cross-sectional data. To address the major methodological problems the authors use a national probability sample of establishments, measures of work practices and performance that are comparable across organizations, and most importantly a unique longitudinal design incorporating data from a period prior to the advent of high performance work practices. Their results suggest that work practices that transfer power to employees, often described as "high performance" practices, may raise productivity, although the statistical case is weak. However, the authors also find that these work practices on average raise labor costs and labor productivity. While these results do not appear to be consistent with the view that such practices are good for employers, neither do they suggest that such practices harm employers. The results are, however, consistent with the view that these practices raise average

compensation and hence may be good for employees.

Carlin, Wendy

PD September 1998. **TI** Finance, Investment and Growth. **AU** Carlin, Wendy; Mayer, Colin. **AA** Carlin: University College London. Mayer: Said Business School and University of Oxford. **SR** University College London Discussion Papers in Economics: 98/09; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 42. **PR** 4 pounds or \$8.00. **JE** E22, E23, G31, G32, O40. **KW** Financial Systems. Corporate Ownership. Legal Form. Growth. Investment.

AB This paper evaluates the relations between industrial activity and the structure of financial systems, corporate sectors and legal arrangements in different countries. Using data from 20 OECD countries in 27 industries over the period 1970-1995, we evaluate whether there is a link between industry activity and a combination of country structures and industry characteristics. We find significant interrelations between the two both in terms of industry growth rates and investment shares. The relations are sensitive to countries' stages of economic development for example, the link between concentration of ownership and economic activity is of opposite sign in low and high income countries. There is strong evidence that the relations between financial structure and economic activity come through expenditure and R&D rather than fixed capital formation.

PD September 1999. **TI** Finance, Investment and Growth. **AU** Carlin, Wendy; Mayer, Colin. **AA** Carlin: University College, London. Mayer: University of Oxford. **SR** Centre for Economic Policy Research Discussion Paper: 2233; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 52. **PR** 5 pounds, \$8 or 8 euros. **JE** E20, G30, O40. **KW** Financial Systems. Ownership. Legal Form. Growth. Investment.

AB See the abstract for Carlin, Wendy; Mayer, Colin. "Finance, Investment and Growth", September 1998. University College London Discussion Papers in Economics: 98/09; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html.

Carlson, Curtis

PD April 2000. **TI** Sulfur Dioxide Control by Electric Utilities: What Are the Gains from Trade? **AU** Carlson, Curtis; Burtraw, Dallas; Cropper, Maureen; Palmer, Karen. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/44R; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 31. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** H43, L51, Q25, Q28, Q40. **KW** Acid Rain. Sulfur Dioxide. Air Pollution. Clean Air Act. Permit Trading.

AB Title IV of the 1990 Clean Air Act Amendments (CAAA) established a market for transferable sulfur dioxide (SO₂) emission allowances among electric utilities. This paper uses econometrically estimated marginal abatement cost functions for power plants affected by Title IV of the CAAA to evaluate the performance of the SO₂ allowance market. Specifically, the authors investigate whether the much-heralded fall in the cost of abating SO₂, compared to original estimates, can be attributed to allowance trading. They demonstrate that, for

plants using low-sulfur coal to reduce SO₂ emissions, technical changes and the fall in low-sulfur coal prices have lowered marginal abatement cost curves by over 50% since 1985. The flexibility to take advantage of these changes is the main source of cost reductions, rather than trading per se. In the long run, allowance trading may achieve cost savings of \$700-\$800 million per year compared to an "enlightened" command and control program characterized by a uniform emission rate standard. However, a comparison of potential cost savings in 1995 and 1996 with actual emissions costs suggests that most trading gains were unrealized in the first two years of the program.

Carraro, Carlo

PD April 2000. **TI** Behavioral and Distributional Effects of Environmental Policy: Introduction. **AU** Carraro, Carlo; Metcalf, Gilbert E. **AA** Carraro: University of Venice and Fondazione Eni Enrico Mattei. Metcalf: Tufts University and NBER. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/24; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 23. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** H21, H23, L16, Q21. **KW** Environmental Policy. Taxation. Incentives. Regulation. Income Distribution.

AB This paper discusses the main policy research issues emphasized by the interrelationship between environmental and economic problems. Economists have traditionally encouraged the use of incentive-based instruments in place of command and control regulation. The starting point for a discussion on efficient environmental policy has been the Pigouvian prescription: taxes on pollution equal to marginal environmental damages. Recently, however, economists have recognized that the Pigouvian prescription needs to be modified based on other economic and political considerations, i.e. the nature of the environmental problems to be managed. These problems are often characterized by: -- transnational dimension; -- links to other economic issues; -- interrelationship with several types of economic externalities. These issues imply the re-designing of environmental policy. This introduction is forthcoming in the book "Behavioral and Distributional Effects of Environmental Policy" edited by Carlo Carraro and Gilbert Metcalf, as part of a research project carried out by FEEM and NBER.

Carrillo, Juan D.

PD September 1999. **TI** On Rush and Procrastination. **AU** Carrillo, Juan D.; Brocas, Isabelle **AA** Columbia Business School and European Centre for Advanced Research in Economics (ECARE). **SR** Centre for Economic Policy Research Discussion Paper: 2237; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 36. **PR** 5 pounds, \$8 or 8 euros. **JE** A12, D81, D91. **KW** Time Inconsistency. Rush. Procrastination. Decision Making.

AB We analyze the decision of individuals with time inconsistent preferences who undertake irreversible activities yielding either a current cost and a future benefit or a current benefit and a future cost. We first show that, when benefits come earlier than costs, the individual faces a coordination problem with himself that results in multiple, rankable equilibria. Some of these equilibria may exhibit rush, in the sense that the activity is undertaken 'too early' (i.e. with a

negative payoff). Multiplicity explains why individuals succeed or not in avoiding temptations, depending on 'the degree of trust in their future decision'. Second, we prove that competition between agents for the same activity can be beneficial for them both when costs come before and after benefits: it decreases the agents' incentives to procrastinate (i.e. to undertake the activity 'too late') in the former case and to rush in the latter. Last, complementarity of tasks exacerbates the tendency to rush and to procrastinate. Under procrastination, it may even imply that projects which are valuable for all agents are never undertaken.

Case, Anne

PD October 1999. **TI** Does School Quality Matter? Returns to Education and the Characteristics of Schools in South Africa. **AU** Case, Anne; Yogo, Motohiro. **AA** Case: Princeton University and NBER. Yogo: Princeton University. **SR** National Bureau of Economic Research Working Paper: 7399; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** \$5.00. **JE** I21, I28, J24, J31, O15. **KW** School Quality. Education. Returns to Schooling. Human Capital. Labor Markets.

AB This paper contributes to what is known about the impact of school quality, by documenting its effect on the incomes of Black South Africans, using data from the 1996 South African census and two national surveys of school quality. South Africa provides an interesting laboratory for studying the impact of school quality on labor market outcomes. Under the Apartheid system, Blacks faced extremely limited residential and school choices, which limits the extent to which results are attributable to the endogeneity of school and residential choice. In addition, Black schools' funding and staffing decisions were made rather arbitrarily by a White government that was at best indifferent to the needs of Black schools. Large differences in pupil/teacher ratios developed between Black schools, differences much larger than those observed in the United States. Using a two-state estimation procedure similar to that employed by Card and Krueger (1992) and by Heckman et al. (1996), the authors find that the quality of schools in a respondent's magisterial district of origin has a large and significant effect on the rate of return to schooling for Black men. These results are similar to those estimated by Card and Krueger for the US.

PD October 1999. **TI** How Hungry is the Selfish Gene? **AU** Case, Anne; Lin, I-Fen; McLanahan, Sara. **AA** Case: Princeton University and NBER. Lin and McLanahan: Princeton University. **SR** National Bureau of Economic Research Working Paper: 7401; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 18. **PR** \$5.00. **JE** I31, J13, O10. **KW** Children. Basic Needs. Food Expenditures. Adoption. Stepchildren.

AB We examine resource allocation in step-households, in the United States and South Africa, to test whether child investments vary according to economic and genetic bonds between parent and child. We used 18 years of data from the Panel Study of Income Dynamics, and compare food expenditure by family type, holding constant household size, age composition and income. We find that in those households in which a child is raised by an adoptive, step or foster mother, less is spent on food. We cannot reject the hypothesis that the effect of replacing a biological child with a non-biological child is the same, whether the non-biological child is an adoptive,

step or foster child of the mother. In South Africa, where we can disaggregate food consumption more finely, we find that when a child's biological mother is the head or spouse of the head of household, the household spends significantly more on food, in particular on milk and fruit and vegetables, and significantly less on tobacco and alcohol. The genetic tie to the child, and not any anticipated future economic tie, appears to be the tie that binds.

Cassimon, Danny

TI Prospective Aid and Indebtedness Relief: A Proposal. **AU** Berlage, Lode; Cassimon, Danny; Dreze, Jacques H.; Reding, Paul.

Cavendish, William

PD 1999. **TI** Empirical Regularities in the Poverty-Environment Relationship of African Rural Households. **AA** CSAE, University of Oxford and Imperial College, London. **SR** Centre for the Study of African Economies Working Paper: WPS/1999/21; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csaee.ox.ac.uk/. **PG** 27. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** C81, D12, O13, Q21, Q28. **KW** Africa. Zimbabwe. Poverty. Rural Households. Environment. Common Property. **AB** Analysis of rural households and environmental resources is beset by inadequate data, especially in Africa. Using purpose-collected panel data from Zimbabwe, we demonstrate seven empirical regularities in the rural poverty-environment relationship. Most importantly, environmental resources make a significant contribution to average rural incomes. Poorer households also depend heavily on these resources, which contribute around 40 percent to their incomes. However richer households use greater quantities of environmental resources in total. Finally, considerable differentiation exists in the economic characteristics of environmental goods. These results demonstrate the considerable economic significance of environmental resources to rural households. Surveys which ignore them miscalculate rural incomes and welfare.

Chacko, George

PD October 1999. **TI** Dynamic Consumption and Portfolio Choice with Stochastic Volatility in Incomplete Markets. **AU** Chacko, George; Viceira, Luis M. **AA** Chacko: Harvard University. Viceira: Harvard University and NBER. **SR** National Bureau of Economic Research Working Paper: 7377; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 37. **PR** \$5.00. **JE** E21, G11, G12. **KW** Portfolio Choice. Consumption. Stochastic Volatility. Hedging. Risk Aversion.

AB This paper analyzes optimal portfolio choice and consumption with stochastic volatility in incomplete markets. Using the Duffie-Epstein (1992) formulation of recursive utility in continuous time, it shows that the optimal portfolio demand for stocks under stochastic volatility varies strongly with the investor's coefficient of relative risk aversion, but only slightly with her elasticity of intertemporal substitution; by contrast, optimal consumption relative to wealth depends on both preference parameters. This paper also shows that stochastic variation in volatility produces an optimal intertemporal hedging demand for stocks which is negative when changes in

volatility are instantaneously negatively correlated with excess stock returns and investors have coefficients of relative risk aversion larger than one. The absolute size of this demand increases with the size of this correlation, and also with the persistence of shocks to volatility. An application to the US stock market show that empirically this correlation is negative and large, which implies a negative hedging demand for stocks. This application also shows that only low frequency shocks to volatility exhibit enough persistence to generate sizable hedging demands by long-term, risk averse investors.

Chakravorty, Ujjayant

PD November 1999. **TI** Transition from Fossil Fuels to Renewable Energy: Evidence from a Dynamic Simulation Model with Endogenous Resource Substitution. **AU** Chakravorty, Ujjayant; Tse, Kin-Ping. **AA** Emory University and University of Hawaii. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 99/89; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 40. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** O33, Q32, Q42. **KW** Exhaustible Resources. Endogenous Substitution. Alternative Energy Sources.

AB This paper applies an economic model of climate change that is based on endogenous substitution of energy resources to determine the effect of advances in renewable technology on aggregate and sectoral fossil fuel use and energy prices. It uses a Nordhaus type partial equilibrium model of the energy sector with four demand sectors -- electricity, transportation, residential and industrial energy and three of the commercially most important exhaustible resources -- oil, coal and natural gas. The findings suggest that among the major commercial fuels, oil and natural gas use are not very sensitive to changes in the cost of solar energy, while coal use is expected to reduce drastically as solar becomes more economical. These results suggest that research and development in renewable energy may play only a limited role in the short run, while creating the basis for a transition to a sustainable energy economy over the longer time horizon.

Chalmers, Jenny

PD July 2000. **TI** Are Casual Jobs a Freeway to Permanent Employment? **AU** Chalmers, Jenny; Kalb, Guyonne. **AA** Chalmers: University of New South Wales. Kalb: Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Paper: 00/08; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/. **PG** 35. **PR** no charge. **JE** C39, J42, J64. **KW** Unemployment. Casual Employment. Job Search. Multivariate Duration Models. Hazard Rate.

AB This study examines whether casual work can shorten the time taken to move from unemployment into permanent work using longitudinal data from the Survey of Employment and Unemployment Patterns. The analysis is based on comparison of the transition rate from unemployment to permanent work with the combined transition rates of unemployment to casual work and casual work to permanent work. Hazard rate models are used to estimate each of the transition rates. The models include observed and unobserved heterogeneity and allow for correlation between the transition rates. The evidence presented suggests that accepting casual work is beneficial for some

unemployed people in their search for permanent work.

Chander, Parkash

PD August 2000. **TI** A Simple Measure of Risk Aversion in the Large and an Application. **AA** Indian Statistical Institute, India. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/41; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 26. **PR** \$100 per year. **JE** D81, D82, H21, H24, M49. **KW** Expected Utility. Risk Aversion. Certainty Equivalence. Multiple Risk Bearing. Principal-Agent.

AB We introduce a simple measure of risk aversion in the large. Besides satisfying properties which are conceptually analogous to the usual properties of the Arrow-Pratt measure, the index of risk aversion in the large leads to a stronger concept of decreasing risk aversion, which necessarily implies decreasing absolute risk aversion but not necessarily non-increasing relative risk aversion. The index also leads to a recursive procedure for refining the set of vN-M utility functions. We show that the majority of refinements considered in the theory of multiple risk bearing including that of mixed risk aversion can be obtained from this procedure. Finally, as an illustration, we apply the measure to characterize individual behavior under uncertainty in the principal-agent model of optimal income tax enforcement in which the risks involved are indeed large.

Chane Kune, Bernard

PD December 2000. **TI** Capital Stock and Productivity in French Transport: An International Comparison. **AU** Chane Kune, Bernard; Mulder, Nanno. **AA** CEPII. **SR** CEPII Working Paper: 2000/18; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 74. **PR** no charge. **JE** D24, L91. **KW** Transport. Capital Stock. Total Factor Productivity. France. International Comparisons.

AB The efficiency of service providers is often approximated by labor productivity. However, in many services such as transport, capital is a major production factor. To judge the overall efficiency of these services, labor productivity measures should therefore be complemented by measures of capital and total factor productivity (TFP). For France, to date, capital productivity and TFP could not be estimated for individual branches of transport as no capital input estimates were available at this level. This paper aims to fill this gap by providing new detailed estimates of capital input in French transport from 1970 onwards. These data are used in combination with series on output and labor input to estimate productivity. The paper first discusses the methodology implemented to measure the contribution of capital to production and then gives the main results. The variance of productivity patterns across transport sectors found in France is not unique, as illustrated by a comparison with Germany, the United Kingdom and the United States.

Chateau, Jean

TI Economic Consequences of Pension Reforms in Europe: An Investigation with the INGENUE World Model. **AU** Aglietta, Michel; Chateau, Jean; Fayolle, Jacky; Juillard, Michel; Le Cacheux, Jacques; Legarrec, Gilles; Touze, Vincent.

Chauvin, Sophie

PD October 2001. **TI** Exit Options for Argentina with a Special Focus on their Impact on External Trade. **AA** CEPII. **SR** CEPII Working Paper: 2001/07; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 54. **PR** no charge. **JE** F10, F30, O54. **KW** Trade. Exchange Rate Regime. Argentina.

AB The economic recession in Argentina raised the question of the relevance of its exchange rate regime and the issue on the exit options from a currency board arrangement. While dollarization has been much discussed, other exit options might be considered. The exchange rate is also a key macroeconomic variable which influences country competitiveness with spillover effects on its balance of payments position. Thus, the shift from a currency board arrangement to another exchange rate regime might impact Argentina's external trade. To address these issues, the paper assesses export equation with exchange rate variable for Argentina based on gravity models. Then it presents various exit options scenarios to assess the impact that an exchange rate regime shift might have on Argentina's exports.

Chevallier, Agnes

PD December 2001. **TI** La productivite des industries mediterraneennes (Labour Productivity in Mediterranean Manufacturing Industries). **AU** Chevallier, Agnes; Unal-Kesenci, Deniz. **AA** CEPII. **SR** CEPII Working Paper: 2001/16; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 58. **PR** no charge. **JE** E31, J24, J30, L60, O57. **KW** Relative Price Level. Sectoral Productivity. Unit Labor Costs. Regional Integration.

AB This research aims at contributing to a better knowledge of the Mediterranean manufacturing activities and performances. Five countries belonging to the Euro-Mediterranean area are compared with France (Spain, Portugal, Turkey, Morocco and Egypt). National surveys of industrial sectors and enterprises have been used to construct a new database in a same product classification. Data in national currencies are then converted into French francs using the International Comparisons of Output and Productivity (ICOP) methodology. For each pair of countries and each branch, a representative basket of goods produced in the two countries is set. The ratio of the basket values quoted in each country in national currency provides a conversion factor for each branch and then for the whole manufacturing sector. Using these conversion factors, the paper estimates the "real" national levels of production and labor productivity and calculates the levels of the real exchange rates.

Chick, Victoria

PD 2000. **TI** Formalism, Logic and Reality: A Keynesian Analysis. **AU** Chick, Victoria; Dow, Sheila C. **AA** University College London and University of Stirling. **SR** University College London Discussion Papers in Economics: 2000/02; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 21. **PR** 4 pounds or \$8.00. **JE** B41, E10. **KW** Formalism. Open Systems. Human Logic. Imperfect Knowledge.

AB It is the purpose of this paper to elaborate on the argument that formalism is non-neutral, analysis which today

would be described as informal turns into something quite different when formalized. The reasons for non-neutrality refer to the choice of assumptions or axioms, the choice of method, the type of logic employed, and closure. Focusing on the last three of these, the paper addresses the question of how to move from results obtained with formal methods under conditions of closure to the reality one is attempting to model. We explore the need for provisional closure to analyze open systems and for a range of methods to complement formal modeling in the attempt to understand the complex reality of an economic system.

Coda Canati, Francesca

PD April 2000. **TI** Secondary Raw Materials Market Creation: Waste Stock Exchange. **AA** University of Pavia and Fondazione Eni Enrico Mattei. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/28; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 28. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** G15, Q24, Q42. **KW** Exchange. Secondary Raw Materials. Telecommunication. Recycling. Recovery.

AB The purpose of this paper is to point out the necessity to use new instruments for an integrated waste management system. Waste Stock Exchange is an innovative and efficient instrument, if introduced in a solid legal and economic context, as is typical of a free and competitive market. The Waste Stock Exchange Project is going to create a Web-based secondary raw materials market that solves logistical and qualitative problems for all public and private entities that could potentially use some kind of waste in their production cycles, or that implement recycling and recovery programs.

Coelli, Tim

PD September 2000. **TI** On the Econometric Estimation of the Distance Function Representation of a Production Technology. **AA** CORE and University of New England. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/42; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 20. **PR** \$100 per year. **JE** C15, C21, C31, D21, D24. **KW** Distance Function. Endogeneity. Simultaneous Equation Bias. Production Functions. Single Output.

AB Recent developments in the econometric estimation of multi-output, multi-input distance functions have provided a promising new solution to the single-output restriction implicit in the standard production function. However, a suspicion that regressor endogeneity may introduce possible simultaneous equations bias has concerned some econometricians. In this paper we show that, under profit maximizing behavior, distance functions face no greater danger from such bias than their production function cousins. Furthermore, we prove that ordinary least squares (OLS) provides consistent estimates of an input distance function under an assumption of cost minimizing behavior. We also prove that OLS provides consistent estimates of an output distance function under an assumption of revenue maximizing behavior. These results are established for the Cobb-Douglas and translog functional forms, which are the two most commonly used functional forms in applied analyses. Our results provide strong support for the direct estimation of distance functions, and indicate that the

instrumental variables (IV) methods, proposed by some authors, may not be required in many cases.

Cohen, Wesley M.

PD February 2000. **TI** Protecting Their Intellectual Assets: Appropriability Conditions and Why U.S. Manufacturing Firms Patent (or Not). **AU** Cohen, Wesley M.; Nelson, Richard R.; Walsh, John. **AA** Cohen: Carnegie Mellon University and National Bureau of Economic Research. Nelson: Columbia University. Walsh: University of Illinois at Chicago. **SR** National Bureau of Economic Research Working Paper: 7552; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 30. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside US). **JE** D23, O32. **KW** Patents. Research and Development.

AB Based on a survey questionnaire administered to 1478 Research and Development labs in the U.S. manufacturing sector in 1994, this paper finds that firms typically protect the profits of invention with a range of mechanisms, including patents, secrecy, lead time advantages and the use of complementary marketing and manufacturing capabilities. Patents tend to be the least emphasized by firms in the majority of manufacturing industries, and secrecy and lead time tend to be emphasized most heavily. For the protection of product innovations, secrecy now appears to be much more heavily employed across most industries than previously. Firms patent for reasons that often extend beyond directly profiting from a patented innovation through either its commercialization or licensing. In addition to the prevention of copying, the most prominent motives for patenting include the prevention of reveals from patenting related inventions (i.e., "patent blocking"), the use of patents in negotiations and the prevention of suits. Firms in "discrete" product industries, such as chemicals use their patents commonly to block the development of substitutes by rivals. "Complex" product industries, such as telecommunications equipment or semiconductors, use patents to force rivals into negotiations.

Coile, Courtney

PD April 2000. **TI** Delays in Claiming Social Security Benefits. **AU** Coile, Courtney; Diamond, Peter; Gruber, Jonathan; Jousten, Alain. **AA** Coile: MIT. Diamond and Gruber: MIT and NBER. Jousten: CORE and Universite de Liege. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/29; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 26. **PR** \$100 per year. **JE** D91, H55, J14, J26. **KW** Social Security. Retirement. Expected Utility.

AB This paper focuses on Social Security benefit claiming behavior, a take-up decision that has been ignored in the previous literature. Using financial calculations and simulations based on an expected utility maximization model, we show that delaying benefit claim for a period of time after retirement is optimal in a wide variety of cases and that gains from delay may be significant. We find that approximately 10% of men retiring before their 62nd birthday delay claiming for at least one year after eligibility. We estimate hazard and probit models using data from the New Beneficiary Data System to test four cross-sectional predictions. While the data suggest that too few men delay, we find that the pattern of delays by early

retirees is generally consistent with the hypotheses generated by our theoretical model.

Collier, Paul

TI Exports and Firm-Level Efficiency in African Manufacturing. **AU** Bigsten, Arne; Collier, Paul; Dercon, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Oduro, Abena; Oostendorp, Remco; Pattillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert.

PD 2000. **TI** Greed and Grievance in Civil War. **AU** Collier, Paul; Hoeffler, Anke. **AA** Collier: World Bank. Hoeffler: CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/18; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csaee.ox.ac.uk/. **PG** 43. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** C78, D72, D74. **KW** Grievance. Rebellion. Predation. Greeding.

AB This paper compares two contrasting motivations for rebellion: greed and grievance. Most rebellions are ostensibly in pursuit of a cause, supported by a narrative of grievance. But since grievance -- assuagement through rebellion is a public good which a government will not supply, economists predict such rebellions would be rare. Empirically, many rebellions appear to be linked to the capture of resources (such as diamonds in Angola and Sierra Leone, drugs in Colombia, and timber in Cambodia). This paper sets up a simple rational choice model of greed -- rebellion and contrasts its predictions with those of a simple grievance model. Some countries return to conflict repeatedly. Are they conflict-prone or is there a feedback effect whereby conflict generates grievance which in turn generates further conflict? It is shown why such a feedback effect might be present in both greed-motivated and grievance rebellions. The model suggests that opportunities for predation (controlling primary commodity exports) cause conflict and the grievances this generates induce diasporas to finance further conflict. The point of policy intervention here is to reduce the absolute and relative attraction of primary commodity predation and to reduce the ability of diasporas to fund rebel movements.

TI Credit Constraints in Manufacturing Enterprises in Africa. **AU** Bigsten, Arne; Collier, Paul; Dercon, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Oduro, Abena; Oostendorp, Remco; Pattillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert.

PD 1999. **TI** The IMF's Role in Structural Adjustment. **AU** Collier, Paul; Gunning, Jan Willem. **AA** Collier: World Bank. Gunning: CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/1999/18; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csaee.ox.ac.uk/. **PG** 16. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** F32, F33, F34, F36. **KW** Structural Adjustment. IMF. Crisis Management.

AB In the 1980s conditional lending for structural adjustment in developing countries moved the IMF beyond its role of macroeconomic crisis management. Fund-supported adjustment programs have often been flawed by a lack of distributional analysis and by poor sequencing of reforms, notably premature financial liberalization. As a result they have caused avoidable hardship. In addition, the attempt to taper out aid as part of the

reform program leads to avoidable reductions in post-stabilization growth. An important role for the Fund in post-stabilization environments is to provide credible signals to private investors.

TI Contract Flexibility and Dispute Resolution in African Manufacturing. **AU** Bigsten, Arne; Collier, Paul; Dercon, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Oduro, Abena; Oostendorp, Remco; Pattillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert.

Comenetz, Joshua

TI The Gender Gap in Education in Eritrea in 1991-98: A Missed Opportunity? **AU** Brixiova, Zuzana; Bulir, Ales; Comenetz, Joshua.

Comi, Simona

TI Education and Earnings Growth. Evidence from 11 European Countries. **AU** Brunello, Giorgio; Comi, Simona.

TI The Returns to Education in Italy: A New Look at the Evidence. **AU** Brunello, Giorgio; Comi, Simona; Lucifora, Claudio.

Cooper, Russell

PD March 2000. **TI** Designing Stabilization Policy in a Monetary Union. **AU** Cooper, Russell; Kempf, Hubert. **AA** Cooper: Boston University and National Bureau of Economic Research. Universite Paris I Pantheon-Sorbonne. **SR** National Bureau of Economic Research Working Paper: 7607; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 30. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** E50, F33, F41. **KW** Monetary Union.

AB While the European Monetary Union (EMU) is now a reality, debate among economists nonetheless continues about the design and desirability of monetary unions. Since an essential element of a monetary union is the delegation of monetary power to a single centralized entity, one of the key issues in this debate is whether a monetary union will limit the effectiveness of stabilization policy. If so, monetary union will not necessarily be welfare improving. This paper studies a two-country world economy and considers various designs of monetary union. The success of monetary union depends on: (i) the commitment ability of the single central bank, (ii) the policy flexibility of the national fiscal authorities and the central monetary authority and (iii) the cross country correlation of shocks. If, for example, the central bank moves before the fiscal authorities, then a monetary union will increase welfare as long as fiscal policy is sufficiently responsive to shocks. However, if the fiscal authorities have a restricted set of tools and/or the monetary authority lacks the ability to commit to its policy, then monetary union may not be desirable.

Coppersmith, Don

PD April 2000. **TI** Indivisibility and Divisibility Polytopes. **AU** Coppersmith, Don; Lee, Jon. **AA** Coppersmith: T.J. Watson Research Center. Lee: University of Kentucky and CORE. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/31; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-

la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 32. **PR** \$100 per year. **JE** C61. **KW** Integer Programming. Polytopes. Clipped Cubes. Totally Dual Integral. Ideal Matrix.

AB We study the polytopes of binary n-strings that encode (positive) integers that are not divisible by a particular positive integer p -- the indivisibility polytopes, as well as the more general "clipped cubes". Also, we discuss a potential application to factoring. Finally, we present some results concerning divisibility polytopes.

Covas, Francisco

TI Moving the Escudo into the Euro. **AU** Braga de Macedo, Jorge; Covas, Francisco; Nunes, Luis Catela.

Craig, Steven

TI Local Revenue Hills: A General Equilibrium Specification with Evidence from Four U.S. Cities. **AU** Haughwout, Andrew; Inman, Robert; Craig, Steven; Luce, Thomas.

Crawford, Ian A.

TI Nonparametric Engel Curves and Revealed Preference. **AU** Blundell, Richard; Browning, Martin; Crawford, Ian A.

PD December 1999. **TI** Nonparametric Tests of Stochastic Dominance in Bivariate Distributions, with an Application to UK. **AA** IFS and University College London. **SR** University College London Discussion Papers in Economics: 99/07; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 17. **PR** 4 pounds or \$8.00. **JE** C14, D30, J22. **KW** Social Welfare. Stochastic Dominance. Nonparametric Methods. Bivariate Distributions.

AB This paper makes straightforward extensions of Anderson's (1996) nonparametric statistical tests of stochastic dominance criteria to bivariate distributions. These tests are applied to a time series of cross-section datasets on household level total expenditure and non labor market time in the UK.

Cropper, Maureen

TI Sulfur Dioxide Control by Electric Utilities: What Are the Gains from Trade? **AU** Carlson, Curtis; Burtraw, Dallas; Cropper, Maureen; Palmer, Karen.

TI Mortality Risk Valuation for Environmental Policy. **AU** Krupnick, Alan; Alberini, Anna; Cropper, Maureen; Simon, Nathalie.

Crosson, Pierre

PD March 1999. **TI** Impacts of Federal Policies and Programs on Wetlands. **AU** Crosson, Pierre; Frederick, Kenneth D. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/26; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 52. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** Q15, Q24, Q25, Q28, R52. **KW** Wetlands. Land Use. Agricultural Policy. Water Policy. Environmental Policy.

AB Human activities have resulted in the loss of about half of the original 221 million acres of wetlands in the conterminous 48 states. Federal laws, policies, and programs have had major impacts on the nation's wetland resources. Initially, they

encouraged and subsidized the draining and filling of wetlands, the flooding of wetlands behind dams, and the diversion and alteration of streamflows to riparian wetlands. More recently, federal policies have been directed to conserving and preventing further net losses. The focus of this study is on the impacts of federal policies on riparian wetlands, i.e., those formed at the interface of rivers and streams and uplands and that require occasional flooding to maintain the health of their ecosystems. The study identifies the trends in wetland acreage, describes the principal federal policies and programs impacting riparian wetlands, summarizes what is currently known or can be deduced from existing research about the impacts of these policies and programs on riparian wetlands, identifies key knowledge gaps, and suggests priorities for additional research.

Cuff, Katherine

TI A Minimum Wage can be Welfare-Improving and Employment-Enhancing. **AU** Boadway, Robin; Cuff, Katherine.

TI Monitoring Job Search as an Instrument for Targeting Transfers. **AU** Boadway, Robin; Cuff, Katherine.

TI Optimal Income Taxation with Quasi-Linear Preferences Revisited. **AU** Boadway, Robin; Cuff, Katherine; Marchand, Maurice.

TI Inter-Jurisdictional Competition for Firms: Jobs as Vehicles for Redistribution. **AU** Boadway, Robin; Cuff, Katherine; Marceau, Nicolas.

Cukierman, Alex

PD September 1999. **TI** Labour Markets and Monetary Union: A Strategic Analysis. **AU** Cukierman, Alex; Lippi, Francesco. **AA** Cukierman: Tel Aviv University. Lippi: Banca d'Italia. **SR** Centre for Economic Policy Research Discussion Paper: 2236; CEPR, 90- 98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** E50, E58, J50, J51. **KW** Monetary Union. Inflation. Unemployment. Labor Unions. Monetary Policy.

AB This paper analyzes the macroeconomic consequences of the establishment of a monetary union in the presence of unionized labor markets. It is shown that the effects of the formation of a monetary union depend on several labor market features, such as the degree of centralization of wage bargaining, labor unions' inflation aversion and the degree of substitutability between the labor of different unions. In particular, the switch from national monetary policies to a unified monetary policy usually affects both inflation and unemployment, even when all structural parameters of the economy and of unions' and policy makers' preferences remain the same. The benchmark case of a monetary union between identical countries suggests that the switch to a monetary union is likely to make labor unions more aggressive, increasing unemployment. Qualifications to this result are provided and their robustness is investigated under alternative structural assumptions, like cross-country asymmetries, (pre-union) ERM (exchange rate mechanism) membership and wage leadership.

Cummings, Amy McAbee

TI Construction Minerals in the Baltimore-Washington Metropolitan Area: A Land Management Analysis. **AU** Wernstedt, Kris; Cummings, Amy McAbee.

Curran, Christopher

PD October 2000. **TI** Optimal Agency Relationships in Search Markets. **AU** Curran, Christopher; Schrag, Joel. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 234; 600 Pennsylvania Avenue, NW, Washington, DC 20580. Website: bperson@ftc.gov. **PG** 33. **PR** no charge. **JE** D82, D83, L85. **KW** Search. Matching Markets. Real Estate. Agency Problems. Asymmetric Information.

AB We compare a seller's agency regime, in which agents give sellers information about buyers' willingness to pay, with a buyer's agency regime, in which agents keep buyers' information confidential. Aggregate gains from trade can be higher under either agency regime. Aggregate gains from trade are higher under buyer's agency if traders expect to spend less time in the market under buyer's agency. Equivalently, aggregate gains from trade are higher under seller's agency only if traders expect to spend less time in the market under seller's agency. We use our theoretical results to interpret empirical findings on the effects of different agency regimes.

Currie, David

PD October 1999. **TI** Delegation and the Ratchet Effect: Should Populations Be Pro- Industry? **AU** Currie, David; Levine, Paul L.; Rickman, Neil. **AA** Currie: London Business School. Levine and Rickman: University of Surrey. **SR** Centre for Economic Policy Research Discussion Paper: 2274; CEPR, 90- 98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 44. **PR** 5 pounds, \$8 or 8 euros. **JE** L51. **KW** Delegation. Ratchet Effect. Procurement.

AB Delegation to independent bodies whose preference can be different from those of the government has been shown to have beneficial commitment benefits in areas as widely diverse as monetary policy and trade. This paper addresses the case for delegation in the context of a cost-reimbursement procurement problem. The suggested solution combines several features of the modern regulatory environment: government commitment to a particular regulator, the provision of independence to that regulator, and heterogeneity across regulators available. We find that delegation to an independent industry regulator, whose preferences are more pro-rent than those of the government, can raise welfare by mitigating the ratchet effect.

Cutler, David M.

PD October 1999. **TI** The Technology of Birth: Is it Worth It? **AU** Cutler, David M.; Meara, Ellen. **AA** Cutler: Harvard University and NBER. Meara: Harvard Medical School. **SR** National Bureau of Economic Research Working Paper: 7390; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** I11, I12, I18, J13. **KW** Health Production. Infant Mortality. Premature Births. Children. Low Birth Weight.

AB We evaluate the costs and benefits of increased medical spending for low birth weight infants. Lifetime spending on low birth weight babies increased by roughly \$40,000 per birth between 1950 and 1990. The health improvements resulting from this have been substantial. Infant mortality rates fell by 72 percent over this time period, largely due to improved care for premature births. Considering both length and quality of life, we estimate the rate of return for care of low birth weight infants at over 500 percent. Although prenatal care and

influenza shots are more cost effective than neonatal care, this is significantly more cost effective than other recent innovations such as coronary artery bypass surgery, treatment of severe hypertension, or routine pap smears for women aged 20-74. We conclude that the answer to the question posed in this paper is a resounding "Yes."

Dafny, Leemore

PD February 2000. **TI** Does Public Insurance Improve the Efficiency of Medical Care? Medicaid Expansions and Child Hospitalizations. **AU** Dafny, Leemore; Gruber, Jonathan. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7555; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 32. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** H51, I18. **KW** Health Insurance. Medicaid. United States.

AB One of the benefits commonly claimed for expanded public health insurance is improved efficiency of medical care delivery, but this claim has little rigorous empirical support. This paper provides such support by assessing the impact of the Medicaid expansions over the 1983-1996 period on the incidence of avoidable hospitalization: over this period Medicaid eligibility expansions were associated with a 22 percent decline in avoidable hospitalization. But we also find that there is a countervailing and larger impact in terms of increased access to hospital care for newly eligible children, so that there is an overall 10 percent rise in child hospitalizations due to the expansions. The expansions have mixed implications for treatment intensity, but appear to be associated with a significant shift in the types of hospitals at which children are treated, with fewer children treated in public hospitals and more in for-profit facilities.

Dalmazzo, Alberto

PD June 2001. **TI** Resources and Incentives to Reform: A Model and Some Evidence on Sub-Saharan African Countries. **AU** Dalmazzo, Alberto; de Blasio, Guido. **AA** Dalmazzo: University of Siena. De Blasio: Bank of Italy and International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/86; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 27. **PR** \$10.00. **JE** D72, E22, Q33. **KW** Investment. Autocracy. Reforms.

AB The paper models the incentives for a self-interested government to implement "good" policies. While good policies lead to investment and growth, they reduce the government's ability to increase supporters' consumption. The model predicts that resource abundance is conducive to poor policies and, consequently, to low investment. The implications of the model are broadly supported by evidence on sub-Saharan African countries. In particular, countries that are rich in natural resources tend to have lower institutional quality and worse macroeconomic and trade policies.

Daniel, James A.

TI Domestic Petroleum Price Smoothing in Developing and Transition Countries. **AU** Federico, Giulio; Daniel, James A.; Bingham, Benedict.

Danninger, Stephen

TI Redistribution Through Public Employment: The Case of Italy. **AU** Alesina, Alberto F.; Danninger, Stephen; Rostagno, Massimo V.

Darmstadter, Joel

TI Can Power From Space Compete? **AU** Macauley, Molly K.; Darmstadter, Joel; Fini, John N.; Greenberg, Joel S.; Maulbetsch, John S.; Schaal, A. Michael; Styles, Geoffrey S. W.; Vedda, James A.

TI Winner, Loser, or Innocent Victim? Has Renewable Energy Performed as Expected? **AU** McVeigh, James; Burtraw, Dallas; Darmstadter, Joel; Palmer, Karen.

Dasgupta, Parth

PD 2000. **TI** Valuation and Evaluation: Measuring the Quality of Life and Evaluating Policy. **AA** University of Cambridge and Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/24; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 62. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D60, I31, O20, P50, Q28. **KW** Quality of Life. Social Well-Being. Measurement. Policy Evaluation. Developing Countries.

AB Policy evaluation requires making welfare comparisons across time and communities, and distinguishing current well-being from sustainable well-being. For measuring current well-being, we can use private consumption per capita, life expectancy at birth, literacy, and indices of civil and political liberties. Examining 46 very poor countries, we find that life expectancy at birth is the most highly correlated with their Borda index ranking, followed closely by gross national product per capita -- suggesting that per capita GNP could reasonably continue to be used as a summary measure of social well-being. Although net national product per capita is widely considered to measure the economic component of sustainable well-being, we find it inadequate for intertemporal and cross-country comparisons. The policy-evaluation techniques developed in the 1970s rarely model the combined socioeconomic and ecological system. Recent advances in understanding general resource allocation mechanisms and environmental and resource economics should be incorporated into today's best-practice policy-evaluation techniques.

David, Paul A.

PD February 2000. **TI** Heart of Darkness: Modeling Public-Private Funding Interactions Inside the R&D Black Box. **AU** David, Paul A.; Hall, Bronwyn H. **AA** David: Oxford University. Hall: University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7358; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 24. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** H41, H42, O31, O32. **KW** Research and Development.

AB This paper helps close the analytical gap in literature on the results of interactions between public and private research and development (R&D) expenditures, and their joint effect on the economy. Econometric studies in this area report sometimes confusing and frequently contradictory estimates of the response of company financed R&D to changes in the level and nature of public R&D expenditure, but the necessary

theoretical framework within which the empirical results can be interpreted is seldom provided. A major cause of inconsistencies in the empirical literature is the failure to recognize key differences among the various policy "experiments" being considered, the economy in which they are embedded, and the type of public sector R&D that is contemplated. Using a structural model, we identify the main channels of impact of public R&D, thus characterizing the various effects and distinguishing between short-run and long-run impacts that would show up in a simple regression analysis of nominal public and private R&D expenditure variables. Within the context of this model, it is possible to offer interpretations that shed light on recent cross-section and panel data findings at both high (i.e. national) and low (specific technology area) levels of aggregation.

PD October 1999. **TI** Is Public R&D a Complement or Substitute for Private R&D? A Review of the Econometric Evidence. **AU** David, Paul A.; Hall, Bronwyn H.; Toole, Andrew A. **AA** David: All Souls College, Oxford. Hall: UC Berkeley and NBER. Toole: Stanford University. **SR** National Bureau of Economic Research Working Paper: 7373; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 50. **PR** \$5.00. **JE** H40, H54, L10, O32, O38. **KW** Research and Development. Crowding Out. Government Expenditures.

AB Is public R&D spending complementary and thus "additional" to private R&D spending, or does it substitute for and tend to "crowd out" private R&D? Conflicting answers are given to this question. We survey the body of available econometric evidence accumulated over the past 35 years. A framework for analysis of the problem is developed to help organize and summarize the findings of econometric studies based on time series and cross-section data from various levels of aggregation (laboratory, firm, industry, country). The findings overall are ambivalent and the existing literature as a whole is subject to the criticism that the nature of the "experiment(s)" that the investigators envisage is not adequately specified. We conclude by offering suggestions for improving future empirical research on this issue.

Davidson, Russell

PD January 1999. **TI** Artificial Regressions. **AU** Davidson, Russell; MacKinnon, James G. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 978; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html. **PG** 21. **PR** Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. **JE** C12, C22. **KW** Gauss-Newton Regression. Specification Test. Heteroskedasticity.

AB Associated with every popular nonlinear estimation method is at least one "artificial" linear regression. We define an artificial regression in terms of three conditions that it must satisfy. Then we show how artificial regressions can be useful for numerical optimization, testing hypotheses, and computing parameter estimates. Several existing artificial regressions are discussed and are shown to satisfy the defining conditions, and a new artificial regression for regression models with heteroskedasticity of unknown form is introduced.

Davies, Ryan

TI Long-Term Information: Short-Lived Derivative Securities. **AU** Bernhardt, Dan; Davies, Ryan; Spicer, John.

Davies, Terry

PD March 2000. **TI** Environmental Implications of the Foodservice and Food Retail Industries. **AU** Davies, Terry; Konisky, David M. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/11; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 112. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D62, L81, L89, Q28, Q29. **KW** Foodservice. Food Retail. Service Sector. Environmental Impact. Environmental Profile.

AB The growing size and importance of service sector industries in the U.S. economy raises questions about the suitability of the current environmental management system to deal with perhaps a changing set of environmental concerns. This paper analyzes the environmental impacts associated with the activities undertaken and influenced by two service sector industries -- foodservice (e.g., restaurants) and food retail (e.g., grocery stores). This paper is not a definitive analysis of the magnitude of the environmental effects of these industries, but is intended to be a comprehensive survey of the types of environmental implications -- positive and negative -- of these two service sectors. For this analysis, we use a simple conceptual framework that segregates the environmental impacts of these industries into three categories: direct, upstream, and downstream. We conclude that, while the direct environmental impacts (e.g., energy use; solid waste generation; air and water emissions; food safety concerns; refrigerants) of these industries are important to recognize and address, opportunities also exist for these industries to address their upstream and downstream environmental impacts.

PD March 2000. **TI** Environmental Implications of the Tourism Industry. **AU** Davies, Terry; Cahill, Sarah. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/14; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 49. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D62, L83, Q25, Q28, Q29. **KW** Tourism. Environmental Impact. Leverage. Service Sector. Environmental Profile.

AB This report analyzes the environmental impacts of the tourism industry, which is the third largest retail industry in the United States, behind only automotive dealers and food stores. In 1998, travel and tourism contributed \$91 billion to the U.S. economy, supporting 16.2 million jobs directly and indirectly. While extensive research has documented the significant economic impact of such service industries as tourism, little has been written about their effect on environmental quality. This study uses a framework developed from the industrial ecology literature to assess the impacts of the tourism industry on the environment. Three categories of impact are discussed: direct impacts, including impacts from the travel to a destination, the tourist activities in and of themselves at that destination, such as hiking or boating, and from the creation, operation, and maintenance of facilities that cater to the tourist; "upstream" impacts, resulting from travel service providers' ability to influence suppliers; and "downstream" impacts, where service providers can influence the behavior or consumption patterns of customers.

PD October 1999. **TI** Environmental Implications of the Health Care Service Sector. **AU** Davies, Terry; Lowe, Adam I. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/01; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 51. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D62, I12, I18, Q24, Q25. **KW** Health Care. Medical Services. Service Sector. Environmental Impact. Environmental Profile.

AB As part of a larger study to better understand the environmental effects of service sector activities, we analyze the environmental effects associated with health care. We identify three types of influence: direct impacts, upstream impacts, and downstream impacts; there are also indirect impacts on other sectors of the economy. Many functions performed in the health care industry are common to other sectors, including transportation, laundry, food services, facility cleaning, heating and cooling, and photographic processing. Activities unique to health care involve infectious waste, medical waste, mercury, x-rays, nuclear medicine, pharmaceuticals, and fluoridation. The industry has considerable leverage upstream on its suppliers, which is important to managing risks from the use of medical goods. We identify areas for potential management initiatives to reduce environmental consequences and pollution: controlling emissions from on-site production functions, mercury use, infection control measures, substitution of alternative health care services, and research and data collection.

de Blasio, Guido

TI Resources and Incentives to Reform: A Model and Some Evidence on Sub-Saharan African Countries. **AU** Dalmazzo, Alberto; de Blasio, Guido.

De Sinopoli, Francesco

PD July 2000. **TI** A Spatial Voting Model Where Proportional Rule Leads to Two-Party Equilibria. **AU** De Sinopoli, Francesco; Iannantuoni, Giovanna. **AA** De Sinopoli: CORE. Iannantuoni: CORE and DELTA. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/37; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 18. **PR** \$100 per year. **JE** C72, D72. **KW** Voting. Proportional Rule. Nash Equilibria. Coalitions.

AB In this paper we show that in a simple spatial model where the government is chosen under strict proportional rule, if the outcome function is a linear combination of parties' positions, with coefficients equal to their share of seats, only a two-party voting equilibrium basically exists. The two parties taking a positive number of votes are the two extremist ones. Applications of this result include an extension of the well-known Alesina and Rosenthal model of divided government as well as a modified version of Besley and Coate's model of representative democracy. This result cannot be extended to a general outcome function, but, when the policy is determined by the two leading parties, in pure strategies, only two-party equilibria can emerge. An analogous result holds for coalitions of parties.

de Vries, Sven

PD May 2000. **TI** Combinatorial Auctions: A Survey.

AU de Vries, Sven; Vohra, Rakesh. **AA** de Vries: Zentrum Mathematik. Vohra: Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1296; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 48. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C61, D44. **KW** Combinatorial Auctions. Integer Programming. Asset Bundles.

AB Many auctions involve the sale of a variety of distinct assets. Examples are airport time slots, delivery routes and furniture. Because of complementarities (or substitution effects) between the different assets, bidders have preferences not just for particular items but for sets or bundles of items. For this reason, economic efficiency is enhanced if bidders are allowed to bid on bundles or combinations of different assets. This paper surveys the state of knowledge about the design of combinatorial auctions. Second, it uses this subject as a vehicle to convey the aspects of integer programming that are relevant for the design of such auctions and combinatorial markets in general.

Deacon, Robert T.

PD January 2000. **TI** The Political Economy of Environment-Development Relationships: A Preliminary Framework. **AA** University of California, Santa Barbara and Resources for the Future. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/03; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 26. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D71, H41. **KW** Political Economy. Public Goods.

AB The levels of public goods provided by government are determined in part by the political institutions in a country. Countries governed by democratic institutions will provide public goods at different levels than countries ruled by autocrats or an elite group. To examine this proposition, this paper develops a neoclassical theory of public good provision that allows for different political institutions. Differences in government form are based on a concept of inclusiveness. A less than inclusive government considers only the costs and benefits accruing to a subset of the population. The theory implies that public consumption goods will be underprovided by less inclusive governments. This theory is tested with cross-country data on forms of government and provision of public goods. The empirical estimates are consistent with the theory, indicating that the least democratic governments in the sample provide public goods at levels 30%-60% below the most democratic governments.

Decker, Sandra L.

PD February 2000. **TI** Cigarettes and Alcohol: Substitutes or Complements? **AU** Decker, Sandra L.; Schwartz, Amy Ellen. **AA** Decker: New York University and National Bureau of Economic Research. Schwartz: New York University. **SR** National Bureau of Economic Research Working Paper: 7535; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 17. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside US). **JE** H20. **KW** Taxation.

Alcohol Consumption. Tobacco Use.

AB Taxation of cigarettes and alcohol can raise revenue and reduce consumption of goods with negative external effects. Despite medical and psychological evidence linking their consumption, little previous work has investigated the significance of cross-price effects in cigarette and alcohol consumption. We use individual-level data from the Behavioral Risk Factor Surveillance System to investigate cigarette and alcohol consumption in the US, estimating both own and cross-price elasticities. Results suggest significant cross-price effects. Specifically, we find that higher alcohol prices decrease both alcohol consumption and smoking participation (suggesting a complementarity in consumption), while higher cigarette prices tend to decrease smoking participation but increase drinking. The significance of these findings suggests that further work is warranted to better understand the social and economic relationship between cigarette and alcohol consumption.

Dees, Stephane

TI Consumption Habit and Equity Premium in the G7 Countries. **AU** Allais, Olivier; Cadiou, Loic; Dees, Stephane.

TI A Computational General Equilibrium Model with Vintage Capital. **AU** Cadiou, Loic; Dees, Stephane; Laffargue, Jean-Pierre.

TI Defining Consumption Behavior in a Multi-Country Model. **AU** Allais, Olivier; Cadiou, Loic; Dees, Stephane.

TI Marmotte: A Multinational Model. **AU** Cadiou, Loic; Dees, Stephane; Guichard, Stephanie; Kadareja, Arjan; Laffargue, Jean-Pierre; Rzepkowski, Bronka.

Dehn, Jan

PD May 2000. **TI** Commodity Price Uncertainty and Shocks: Implications for Economic Growth. **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/10; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 48. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** O11, O13, O16, O19. **KW** Growth. Temporary Trade Shocks. Commodity Price Uncertainty.

AB The paper estimates the effects of ex post shocks and ex ante commodity price uncertainty on economic growth, finding that large negative shocks significantly reduce growth rates over long periods, while positive shocks and uncertainty have no effects on growth, even over relatively short periods. The results hold after controlling for investment, government economic policy, and institutional quality, which indicates that: (i) adjustment occurs via capacity utilization; and (ii) inappropriate policy responses on the part of governments are not exclusively to blame. The results are robust to changes in sample composition, the time dimensions of the panel, the choice of estimation method, and instrumenting for endogenous regressors.

PD May 2000. **TI** Private Investment in Developing Countries: The Effects of Commodity Shocks and Uncertainty. **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/11; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 38. **PR** 3 pounds/\$5 plus p+p

(subscription 55 pounds or \$88). **JE** E22, E62, O16, O19, R42. **KW** Investment. Temporary Trade Shocks. Commodity Price Uncertainty.

AB The link between ex post discrete shocks and private investment have never been formally tested in a panel data context, while the evidence of a link between ex ante commodity price uncertainty and investment is weak. This paper constructs measures of discrete shocks and uncertainty using a new multi-country data set of aggregate commodity price indices, and tests the relationship between various manifestations of commodity price variability and private investment rates within the context of a canonical empirical investment model estimated on a sample of 44 developing countries. The analysis confirms theoretical predictions that positive ex post commodity price shocks have strong positive effects on private investment rates in low income developing countries, conditional upon the level of commodity prices. It is also shown that the prospect of uncertain future commodity prices and ex post negative shocks do not affect private investment rates.

PD May 2000. **TI** Commodity Price Uncertainty in Developing Countries. **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/12; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 50. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** O13, O19. **KW** Commodity Price Uncertainty.

AB Six measures of commodity price uncertainty and variability are constructed for 113 developing countries over the period 1957:1-1997:4 using a new geometrically weighted quarterly data set of country-specific commodity prices. The following results obtain: A positive and highly significant relationship between commodity export concentration and commodity price uncertainty is confirmed for all the six uncertainty measures. There is no link between regional affiliation and exposure to uncertainty. There is no relationship between uncertainty and the type of commodities exported with the exception of oil producers, which face greater uncertainty due to discrete and well-publicized oil shocks. Uncertainty displays considerable time variation in the form of discrete spikes, secular increases over time, and considerable persistence. Large differences between uncertainty and variability confirm the importance of distinguishing between predictable and unpredictable components in the price process when measuring uncertainty.

Del Rey, Elena

PD April 2000. **TI** Teaching Versus Research: A Model of State University Competition. **AA** CORE. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/30; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 29. **PR** \$100 per year. **JE** H52, H80, I21, I28, L30. **KW** Education. Research. University Competition. Educational Finance. Teaching.

AB This paper analyzes a competition game between two universities that teach and research in the same jurisdiction. The resulting equilibrium is unique and symmetric but differs according to preferences, technologies and public policy. The budget for university finance is exogenously given and consists of a lump-sum amount and a per-student allocation. Under this

finance structure, we are able to identify four types of equilibria characterized, respectively, by full-time teaching, full-time research, selective teaching plus research and mass teaching plus research. Conditions for each of them to take place are derived. By manipulating the parameters of the finance scheme the government can, in some cases, determine final levels of research and education quality.

della Paolera, Gerardo

PD October 1999. **TI** Internal Versus External Convertibility and Developing-Country Financial Crises: Lessons From the Argentine Bank Bailout of the 1930s. **AU** della Paolera, Gerardo; Taylor, Alan M. **AA** della Paolera: Capital Federal, Argentina. Taylor: UC Davis and NBER. **SR** National Bureau of Economic Research Working Paper: 7386; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 19. **PR** \$5.00. **JE** E42, E50, F30, N16, N26. **KW** Monetary Systems. Banking. Economic History. Financial Crises. Gold Standard.

AB Argentina's money and banking system was hit hard by the Great Depression. The banking sector was awash with bad assets that built up in the 1920's. Gold convertibility was suspended in December 1929, even before the crisis seriously damaged the core economies. Commonly, these events are seen as being driven by external real shocks associated with the World Depression, despite the puzzle of the timing. The authors argue for an alternative, or complementary, explanation of the crisis that focuses on the inside-outside money relationship in a system of fractional-reserve banking and gold-standard rules. This internal explanation for the crisis involves no timing puzzle. The tension between internal and external convertibility can be felt when banks fall into bad times, and an internal drain can feed an external drain. The resolution of the crisis required lender-of-last-resort actions by the state. When the state bank became insolvent, the currency board started bailing out the system using high-powered money. Thus came about the demise of the currency board and the creation of a central bank in 1935. The central bank engineered a bailout of the banking system at a massive social cost. The parallels with recent developing-country crises are remarkable.

DeLong, J. Bradford

PD March 2000. **TI** Cornucopia: The Pace of Economic Growth in the Twentieth Century. **AA** University of California, Berkeley, National Bureau of Economic Research, and Federal Reserve Bank of San Francisco. **SR** National Bureau of Economic Research Working Paper: 7602; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 38. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** E21, E23, N30. **KW** Consumption. Productivity.

AB There is one central fact about the economic history of the twentieth century: above all, the century just past has been the century of increasing material wealth and economic productivity. No previous era and no previous economy has seen material wealth and productive potential grow at such a pace. The bulk of America's population today achieves standards of material comfort and capabilities that were beyond the reach of even the richest of previous centuries. Even lower middle-class households in relatively poor countries have today material standards of living that would make them, in many respects, the envy of the powerful and lordly of past

centuries.

Demichelis, Stefano

PD June 2000. **TI** Life-Span and the Determinacy of Equilibrium in Economies of Overlapping Generations. **AU** Demichelis, Stefano; Polemarchakis, Heracles M. **AA** CORE. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/34; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 16. **PR** \$100 per year. **JE** D50, D91, E21. **KW** Life-Span. Continuous Time. Overlapping Generations. Determinacy. General Equilibrium. **AB** Equilibrium paths in an economy of overlapping generations are determinate. Time is either discrete or continuous; in either case, it extends into the infinite future and, possibly, the infinite past. There is one, nonstorable commodity at each date. With continuous time, equilibrium paths of prices are smooth. With discrete time, as the number of periods in the life-span of individuals increases, equilibrium paths converge to the continuous time solutions. If time extends into the infinite past as well as into the infinite future, in continuous time, all non-stationary equilibrium paths of prices are time-shifts of a single path; in addition, there are two stationary solutions. In discrete time, there is a one dimensional family of non-stationary solutions, up to time-shift; however the indeterminacy vanishes as the number of periods in the life-span of individuals tends to infinity. If, alternatively, time has a finite starting point, in discrete time the degree of indeterminacy increases with the life-span of individuals, and, in continuous time, it is infinite. However, asymptotic behavior is that of the economy that originates in the infinite past.

Deolalikar, Anil B.

PD July 2000. **TI** Socioeconomic Determinants of Disease Transmission in Cambodia. **AU** Deolalikar, Anil B.; Laxminarayan, Ramanan. **AA** Deikakujar: University of Washington. Laxminarayan: Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/32; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 19. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** C10, I12, I18, I30, O18. **KW** Disease Transmission. Sanitation. Infection. Public Health. Health Production.

AB The process of acquiring an infection has two components: first, exposure through proximity to another infected individual, and second, transmission of the disease. Earlier studies of the socioeconomic factors that affect the probability of acquiring an illness assume uniform exposure to infected individuals and may therefore result in biased estimates. This paper develops an empirical model, consistent with epidemiological models of spread of infections, to estimate the impact of socioeconomic variables on the extent of disease transmission within villages in Cambodia. Data from the 1997 Cambodia Socioeconomic Survey are used in this analysis.

Dercon, Stefan

TI Exports and Firm-Level Efficiency in African Manufacturing. **AU** Bigsten, Arne; Collier, Paul; Dercon, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Oduro, Abena; Oostendorp, Remco; Pattillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert.

TI Credit Constraints in Manufacturing Enterprises in Africa. **AU** Bigsten, Arne; Collier, Paul; Dercon, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Oduro, Abena; Oostendorp, Remco; Pattillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert.

TI Demobilisation, Land and Household Livelihoods: Lessons from Ethiopia. **AU** Ayalew, Daniel; Dercon, Stefan; Krishnan, Pramila.

PD 2000. **TI** Income Risk, Coping Strategies and Safety Nets. **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/26; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csaee.ox.ac.uk/. **PG** 44. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** D81, D91, G22, H55. **KW** Risk. Poverty. Vulnerability. Precautionary Savings. Safety Nets.

AB Households in developing countries are faced with high risk and income fluctuations. This paper reviews the recent theoretical and empirical literature on household and individual responses to income risk by the poor in developing countries. The focus is on the lessons for further research and the policy implications of this. Themes discussed are income strategies, in which households change their activities in response to risk, and risk coping strategies, such as self-insurance via savings and mutual support networks, aimed at risk-sharing. The scope and limitations of policy interventions, such the role of markets, targeted programs and general safety nets are discussed.

TI Contract Flexibility and Dispute Resolution in African Manufacturing. **AU** Bigsten, Arne; Collier, Paul; Dercon, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Oduro, Abena; Oostendorp, Remco; Pattillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert.

Devereux, Michael B.

PD October 1999. **TI** Exchange Rate Pass-Through and the Welfare Effects of the Euro. **AU** Devereux, Michael B.; Engel, Charles; Tille, Cedric. **AA** Devereux: University of British Columbia. Engel: University of Washington and NBER. Tille: Federal Reserve Bank of New York. **SR** National Bureau of Economic Research Working Paper: 7382; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** F31, F33, F41, F42. **KW** Monetary Union. Euro. Exchange Rate Pass-Through. Foreign Exchange. Price Level.

AB This paper explores the implications of the European single currency within a simple sticky price intertemporal model. The main issue we focus on is how the euro may alter the responsiveness of consumer prices to exchange rate changes. Our central conjecture is that the acceptance of the euro will lead European prices to become more insulated from exchange-rate volatility, much the way U.S. consumer prices already are. We show that this has profound consequences for both the volatility and levels of macroeconomic aggregates in both the U.S. and Europe. We find that European welfare is enhanced, and, more surprisingly, that the U.S. shares in Europe's good fortune. Alternative assumptions about how pricing behavior will change lead to different conclusions, but in all cases we can derive specific implications for expected levels and volatility of macroeconomic variables.

Diamond, Peter

TI Delays in Claiming Social Security Benefits. **AU** Coile, Courtney; Diamond, Peter; Gruber, Jonathan; Jousten, Alain.

Diermeier, Daniel

PD December 1999. **TI** A Structural Model of Government Formation. **AU** Diermeier, Daniel; Merlo, Antonio. **AA** Diermeier: Northwestern University. Merlo: New York University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1297; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 41. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C73, C78, D72, H19, P10. **KW** Political Stability. Minority Coalitions. Government Formation. Government Dissolution. Bargaining.

AB In this paper we estimate a bargaining model of government formation in parliamentary democracies. We use the estimated structural model to conduct policy experiments aimed at evaluating the impact of institutional features of the bargaining environment on the type of coalitions that form (e.g., minority or majority) and on their relative stability.

Dinlersoz, Emin Murat

TI More on Phantom Bidding. **AU** Bag, Parimal Kanti; Dinlersoz, Emin Murat; Wang, Ruqu.

Docquier, Frederic

PD July 2000. **TI** Growth and Equality Effects of Pension Plans. **AU** Docquier, Frederic; Paddison, Oliver. **AA** Docquier: University of Lille II and Ministere de la Region Wallonne, Belgium. Paddison: University of Liege and CORE. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/36; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 18. **PR** \$100 per year. **JE** D63, H55, I22, O41. **KW** Public Pensions. Education. Growth. Inequality.

AB We investigate the balanced growth effects of pension plans on the rate of growth and on equality in a closed economy where individual decisions about education are the engine of growth. We distinguish between pay-as-you-go and fully-funded pension systems and differentiate between three different benefit rules: a Beveridgean one (benefits are identical for all agents), a Bismarckian (earnings related) one depending on one's entire earnings history or a Bismarckian one depending on one's partial earnings history. Interestingly, in the latter case the steady state rate of growth is increasing in the rate of contributions.

Donaldson, David

TI The Axiomatic Approach to Population Ethics. **AU** Blackorby, Charles; Bossert, Charles; Donaldson, David.

Dow, Sheila C.

TI Formalism, Logic and Reality: A Keynesian Analysis. **AU** Chick, Victoria; Dow, Sheila C.

Dreze, Jacques H.

TI Prospective Aid and Indebtedness Relief: A Proposal. **AU** Berlage, Lode; Cassimon, Danny; Dreze, Jacques H.; Reding, Paul.

PD September 2000. **TI** Monetary Equilibria. **AU** Dreze, Jacques H.; Polemarchakis, Heracles M. **AA** Dreze: CORE. Polemarchakis: CORE and Brown University. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/44; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 25. **PR** \$100 per year. **JE** D50, E40, E51, E52, E58. **KW** Money. General Equilibrium. Monetary Policy.

AB The introduction of banks that issue money and supply balances and pay out their profits as dividends is the natural modification of the model of general competitive equilibrium that encompasses monetary economies with an operative transactions technology. Monetary policy sets nominal rates of interest and accommodates the demand for balances; alternatively, it sets the supply of balances and rates of interest adjust for money markets to clear. Competitive equilibria exist. Under uncertainty, monetary policy fails to determine the distribution of the rate of inflation or the allocation of resources at equilibrium. If, in addition to rates of interest, monetary policy sets the prices of contingent loans subject to no-arbitrage constraints, or targets the distribution of the terminal level of prices, it lifts the multiplicity.

Dubey, Pradeep

PD October 2000. **TI** Unilateral Deviations with Perfect Information. **AU** Dubey, Pradeep; Haimanko, Ori. **AA** Dubey: SUNY. Haimanko: CORE. **SR** Yale Cowles Foundation Discussion Paper: 1280; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. **PG** 15. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** C72. **KW** Extensive Form Games. Perfect Information. Self-Confirming Equilibria. Nash Equilibria. Unilateral Deviations.

AB For extensive form games with perfect information, consider a learning process in which, at any iteration, each player unilaterally deviates to a best response to his current conjectures of others' strategies; and then updates his conjectures in accordance with the induced play of the game. We show that, for generic payoffs, the outcome of the game becomes stationary in finite time, and is consistent with Nash equilibrium. In general, if payoffs have ties or if players observe more of each others' strategies than is revealed by plays of the game, the same result holds provided a rationality constraint is imposed on unilateral deviations: no player changes his moves in subgames that he deems unreachable, unless he stands to improve his payoff there. Moreover, with this constraint, the sequence of strategies and conjectures also becomes stationary, and yields a self-confirming equilibrium.

Dubra, Juan

PD January 2001. **TI** Expected Utility Theory without the Completeness Axiom. **AU** Dubra, Juan; Maccheroni, Fabio; Ok, Efe A. **AA** Dubra: Yale University. Maccheroni: Universita Bocconi. Ok: New York University. **SR** Yale Cowles Foundation Discussion Paper: 1294; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT

06520-8281. Website: www.econ.yale.edu/cowles. **PG** 12. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** D11, D81. **KW** Expected Utility. Incomplete Preferences. Lotteries. Decision-Making.

AB We study axiomatically the problem of obtaining an expected utility representation for a potentially incomplete preference relation over lotteries by means of a set of von Neumann-Morgenstern utility functions. It is shown that, when the prize space is a compact metric space, a preference relation admits such a multi-utility representation provided that it satisfies the standard axioms of expected utility theory. Moreover, the representing set of utilities is unique in a well-defined sense.

PD March 2001. **TI** Measurability Is Not About Information. **AU** Dubra, Juan; Echenique, Federico. **AA** Dubra: Yale University and Universidad de Montevideo. Echenique: University of California, Berkeley and Universidad de la Republica. **SR** Yale Cowles Foundation Discussion Paper: 1296; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. **PG** 11. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** C60, C70, D82, D84, G12. **KW** Blackwell's Theorem. Measurability. Information Models. Partitions. Sigma Algebras.

AB We comment on the relation between models of information based on signals/partitions, and those based on sigma algebras. We show that more informative signals need not generate finer sigma algebras, hence that Blackwell's theorem fails if information is modeled as sigma algebras. The reason is that the sigma algebra generated by a partition does not contain all the events that can be known from the information provided by the signal. We also show that there is a non-conventional sigma algebra that can be associated with a signal which does preserve its information content. Further, expectations and conditional expectations may depend on the choice of sigma algebra that is associated with a signal. We provide a simple characterization of when the model is robust to changes in the sigma algebras.

PD March 2001. **TI** Monotone Preferences Over Information. **AU** Dubra, Juan; Echenique, Federico. **AA** Dubra: Yale University and Universidad de Montevideo. Echenique: University of California, Berkeley and Universidad de la Republica. **SR** Yale Cowles Foundation Discussion Paper: 1297; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. **PG** 13. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** C70, D11, D81, D82, D83. **KW** Information Value. Blackwell's Theorem. Representation Theorems. Monotone Preferences.

AB We consider preference relations over information that are monotone: more information is preferred to less. We prove that, if a preference relation on information about an uncountable set of states of nature is monotone, then it is not representable by a utility function.

Duran, Jorge

PD October 2000. **TI** A Simple Proof of Existence of Equilibrium in a One Sector Growth Model With Bounded or Unbounded Returns From Below. **AU** Duran, Jorge; Le Van, Cuong. **AA** Duran: CEPREMAP and Universite Catholique

de Louvain. Le Van: CNRS, France. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/50; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 18. **PR** \$100 per year. **JE** C62, D51, E13, O41. **KW** Ramsey Model. One-Sector Growth Models. Investment. Competitive Equilibrium. Growth.

AB We analyze a Ramsey economy when net investment is constrained to be non negative. We prove existence of a competitive equilibrium when utility need not be bounded from below and the Inada-type conditions need not hold. The analysis is carried out by means of a direct and technically standard strategy. This direct strategy (a) allows us to obtain detailed results concerning properties of competitive equilibria, and (b) is amenable to be easily adapted for the analysis of analogous models often found in macroeconomics.

Duranton, Gilles

TI Diversity and Specialization in Cities: Why, Where and When Does It Matter? **AU** Puga, Diego; Duranton, Gilles.

Dustmann, Christian

PD October 1998. **TI** Attitudes to Ethnic Minorities, Ethnic Context and Location Decisions. **AU** Dustmann, Christian; Preston, Ian. **AA** University College London. **SR** University College London Discussion Papers in Economics: 98/10; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 37. **PR** 4 pounds or \$8.00. **JE** D63, J15, J71, R23. **KW** Attitudes. Ethnic Minorities. Locational Choice. Social Exclusion. Welfare.

AB The attitudes of the ethnic majority population towards other communities is a potentially important determinant of social exclusion and of the welfare of ethnic minorities. The suggestion that negative attitudes towards minorities may be affected by the ethnic composition of the locality in which individuals live has often been made and empirically investigated. We point to an important potential for bias in simple estimates of ethnic context effects if individual location decisions are driven in part by attitudinal factors. We also suggest an instrumental variables procedure for overcoming such bias in data with appropriate spatial information. Our results suggest that allowing for such effects is of considerable importance.

Dutz, Mark

TI Does More Intense Competition Lead to Higher Growth? **AU** Hayri, Aydin; Dutz, Mark.

Echenique, Federico

TI Measurability Is Not About Information. **AU** Dubra, Juan; Echenique, Federico.

TI Monotone Preferences Over Information. **AU** Dubra, Juan; Echenique, Federico.

Edison, Hali

PD June 2001. **TI** Wealth Effects and the New Economy. **AU** Edison, Hali; Slok, Torsten. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/77; International Monetary Fund, 700 19th

Street, Washington, DC 20431. Website: www.imf.org. **PG** 20. **PR** \$10.00. **JE** E20, E44. **KW** New Economy. Stock Markets in the 1990s.

AB This paper investigates whether there is a different impact from changes in "new" and "old" economy stock valuations on private consumption. Estimating a reduced-form VAR for seven OECD countries for the 1990s, it is found that the impact from changes in old economy stock valuations on consumption is in general larger in the United States, Canada, and the United Kingdom than in continental Europe. Furthermore, the impact from changes in new economy valuations to consumption is roughly the same in the United States, Canada, the United Kingdom, and in continental Europe. Finally, the results suggest that in continental Europe the impact on consumption from changes in the valuation of new economy stocks is bigger than from the old economy stocks, whereas for the United States, Canada, and the United Kingdom, the impact is more or less the same between the two sectors.

PD June 2001. **TI** New Economy Stock Valuations and Investment in the 1990s. **AU** Edison, Hali; Slok, Torsten. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/78; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 15. **PR** \$10.00. **JE** E20, E44. **KW** Real Investment. New Economy. Stock Markets.

AB This paper investigates whether there is a different impact from changes in "new" and "old" economy stock valuations on private investment for seven OECD economies. A vector autoregressive model is estimated for each individual country, using quarterly data over the period 1990-2000. The findings are that the impact from changes in valuations of new economy stocks to investment is roughly the same in North America and in the United Kingdom as in continental Europe. By contrast, the impact from changes in old economy stock valuations on investment is, in general, larger in North America and in the United Kingdom than in continental Europe. Finally, the results suggest that in continental Europe the impact on investment from changes in the valuation of new economy stocks is bigger than for old economy stocks, whereas for North America and the United Kingdom, the impact is more similar.

Eichenbaum, Martin

TI On the Fundamentals of Self-Fulfilling Speculative Attacks. **AU** Burnside, Craig; Eichenbaum, Martin; Rebelo, Sergio T.

Elbadawi, Ibrahim

TI Reflections on the South African Rand Crisis of 1996 and Policy Consequences. **AU** Aron, Janine; Elbadawi, Ibrahim.

Ely, Jeffrey C.

PD April 2000. **TI** Correlated Equilibrium and Private Monitoring. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1265; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 26. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C72, C73. **KW** Private Monitoring.

Repeated Games. Prisoners' Dilemma. Correlated Equilibria. Grim Trigger.

AB In repeated games, simple strategies such as Grim Trigger, while strict equilibria when monitoring is perfect, can fail to be even approximate Nash equilibria when monitoring is private, yet arbitrarily close to perfect. That is, they fail to be robust to private monitoring. In this paper, it is shown that for a class of repeated Prisoners' Dilemma games these strategies, when viewed as (degenerate) correlated equilibria are robust. In particular, even when monitoring is private and conditionally independent, as the signaling noise goes to zero, there is a sequence of correlated equilibria converging to the Grim Trigger strategies. The correlation device uses an information structure akin to that of Rubinstein's e-mail game.

Emwanu, Tom

TI Changes in Poverty in Uganda, 1992-1997. **AU** Appleton, Simon; Emwanu, Tom; Kagugube, Johnson; Muwonge, James.

Engel, Charles

TI Exchange Rate Pass-Through and the Welfare Effects of the Euro. **AU** Devereux, Michael B.; Engel, Charles; Tille, Cedric.

Evenson, Robert

TI Does Intellectual Property Protection Spur Technological Change? **AU** Kanwar, Sunil; Evenson, Robert.

Fafchamps, Marcel

TI Exports and Firm-Level Efficiency in African Manufacturing. **AU** Bigsten, Arne; Collier, Paul; Dercon, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Oduro, Abena; Oostendorp, Remco; Pattillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert.

TI Exports and Firm-Level Efficiency in African Manufacturing. **AU** Bigsten, Arne; Collier, Paul; Dercon, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Oduro, Abena; Oostendorp, Remco; Pattillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert.

TI Credit Constraints in Manufacturing Enterprises in Africa. **AU** Bigsten, Arne; Collier, Paul; Dercon, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Oduro, Abena; Oostendorp, Remco; Pattillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert.

TI Credit Constraints in Manufacturing Enterprises in Africa. **AU** Bigsten, Arne; Collier, Paul; Dercon, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Oduro, Abena; Oostendorp, Remco; Pattillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert.

PD 2000. **TI** Control and Ownership of Assets Within Rural Ethiopian Households. **AU** Fafchamps, Marcel; Quisumbing, Agnes R. **AA** Fafchamps: CSAE, University of Oxford. Quisumbing: IFPRI, Washington DC. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/27; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csaе.ox.ac.uk/. **PG** 33. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** D11, D12, D13, D31. **KW** Ethiopia. Asset Ownership. Asset Control. Marriage Assets.

AB This paper investigates how the control and devolution of productive assets are allocated among husband and wife. Theory predicts that bargaining power within marriage depends on the division of assets upon divorce (exit option) and on control over assets during marriage (non-cooperative marriage). In empirical applications, bargaining power is typically proxied by variables such as dowry payments, assets brought to marriage, and ownership of assets within marriage. Using detailed household data from rural Ethiopia, we show that assets brought to marriage, ownership of assets, control within marriage, and disposition upon death or divorce are only partly related. In rural Ethiopia, control over productive resources is centralized in the hands of the household head, be it a man or a woman, irrespective of ownership at or after marriage. Disposition upon death or divorce only loosely depends on individual ownership during marriage but control over assets is associated with larger claims over these assets upon divorce, a finding consistent with the presence of incentive problems. We also find that assets brought into marriage have little impact on disposition upon death, but matter in case of divorce.

PD 2000. **TI** Assets at Marriage in Rural Ethiopia. **AU** Fafchamps, Marcel; Quisumbing, Agnes R. **AA** Fafchamps: CSAE, University of Oxford. Quisumbing: IFPRI, Washington DC. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/28; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csaе.ox.ac.uk/. **PG** 31. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** D11, D12, D13, D91. **KW** Marriage Assets. Ethiopia.

AB This paper examines the determinants of assets at marriage in rural Ethiopia. We find ample evidence of assortative matching at marriage. Assets brought to marriage are distributed in a highly unequal manner. Sorting operates at a variety of levels -- wealth, schooling, and work experience -- that cannot be summarized into a single additive index. For first unions, assets brought to marriage are positively associated with parents' wealth, indicating that a bequest motive affects assets at marriage. Unlike most brides, grooms appear to accumulate individual assets over time and over marriages. Parents act strategically in the sense that they bequeath more assets at marriage if this results in a better prospective spouse. The marriage market is a major conduit for rural and gender inequality.

PD 1999. **TI** Inventories and Risk in African Manufacturing. **AU** Fafchamps, Marcel; Gunning, Jan Willem; Oostendorp, Remco. **AA** Fafchamps and Gunning: CSAE, University of Oxford. Oostendorp: Free University. **SR** Centre for the Study of African Economies Working Paper: WPS/1999/19; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csaе.ox.ac.uk/. **PG** 34. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** D21, L60, O14. **KW** Precautionary Saving. Industrialization. Contractual Risk. Africa.

AB This paper analyses the effects of risk on the holding of inventories and liquid assets by manufacturing firms. Using a panel data set for Zimbabwe which includes firm-specific measures of contractual risk, we show that contractual risk has a major effect on the holding of stocks of inputs and, to a lesser extent, the constitution of cash reserves. This is consistent with the role of inventories as a hedge against stockout risk. By

contrast, we find that firms facing more inter-annual market risk hold less inventories. This suggests that African manufacturers prefer adapting to long-term market fluctuations as they materialize rather than building up inventories. This interpretation is consistent with the finding that high market risk firms also have a low capacity utilization rate.

TI Contract Flexibility and Dispute Resolution in African Manufacturing. **AU** Bigsten, Arne; Collier, Paul; Dercon, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Oduro, Abena; Oostendorp, Remco; Patillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert.

TI Contract Flexibility and Dispute Resolution in African Manufacturing. **AU** Bigsten, Arne; Collier, Paul; Dercon, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Oduro, Abena; Oostendorp, Remco; Patillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert.

PD 1999. **TI** Networks, Communities and Markets in Sub-Saharan Africa: Implications for Firm Growth and Investment. **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/1999/24; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 23. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** D23, L22. **KW** Networks. Sub-Saharan Africa.

AB This paper examines how relationships and networks affect market exchange in Sub-Saharan Africa. After noting that market exchange arguably plays a larger role in Africa than in developed economies, we show that the presence of transactions costs naturally leads market participants to enter in long-term trading relationships. These relationships form business networks that shape market outcomes. We argue that network segmentation can have large efficiency and equity costs, particularly in international trade. Because of network externalities, groups and countries that are familiar with a particular activity tend to continue investing in that activity. The presence of networks and non-convex transactions costs also complicates the analysis of market competition. Implications for future research are briefly discussed.

PD 1999. **TI** Property Rights in a Flea Market Economy. **AU** Fafchamps, Marcel; Minten, Bart. **AA** Fafchamps: CSAE, University of Oxford. Minten: Katholiek Universiteit van Leuven. **SR** Centre for the Study of African Economies Working Paper: WPS/1999/25; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 39. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** D52, D71, D74. **KW** Madagascar. Flea Markets.

AB This paper studies liberalized grain markets in Madagascar and examines how property rights are protected and contracts are enforced among agricultural traders. We find that the incidence of theft and breach of contract is low, and that the losses resulting from such instances are small. This, however, does not result from reliance on legal institutions -- actual recourse to police and courts are fairly rare, except in cases of theft -- but from traders' reluctance to expose themselves to malfeasance. As a result, Malagasy grain trade has high transactions costs, and little or no forward contracting. The dominant contract enforcement mechanism is trust-based relationships. Trust is established primarily through repeated interaction with little role for referral by other traders. Information on bad clients does not circulate widely, hence

severely limiting group punishments for non-payment.

Faggio, Giulia

TI Gross Job Flows and Firm Growth in Transition Countries: Evidence Using Firm Level Data on Five Countries. **AU** Konings, Jozef; Faggio, Giulia.

Fair, Ray C.

PD March 2001. **TI** Estimates of the Effectiveness of Monetary Policy. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1298; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. **PG** 31. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** E32, E43, E52. **KW** Monetary Policy. Interest Rate Rules. Optimal Control. Tax Rate Rules.

AB This paper examines various interest rate rules, including rules derived by solving optimal control problems, for their ability to dampen economic fluctuations caused by random shocks. A tax rate rule is also considered. A multicountry econometric model is used for the experiments. The results differ sharply from those obtained using recent models in which the coefficient on inflation in the nominal interest rate rule must be greater than one in order for the economy to be stable.

Fairfax, Sally

PD January 1999. **TI** Lessons for the Forest Service from State Trust Land Management Experience. **AA** University of California, Berkeley. **SR** Resources for the Future Discussion Paper: 99/16; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 34. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** H39, H41, Q23, Q24, Q28. **KW** State Trust. Forestry. Land Management. Prudence. Risk Management.

AB State trust land management -- the nation's oldest approach to public resource management -- is a potential source of new ideas for the Forest Service. The federal agency is under pressure to change because the legitimacy of federal agencies -- particularly those whose authority is rooted in science -- is declining, and the institutional framework for public resource management is fragmenting and diversifying. For alternative models, the Forest Service could fruitfully explore the trust standard of prudence (particularly requirements for trustee accountability and record keeping), the role of the beneficiary in trust accountability and constituency building, the trust notion of portfolios and risk management, and state trust land agencies' different approaches to tying program funding to income without eliminating the legislature's role in appropriations. The mandate embodied in western trust organizations also provides examples of institutional flexibility through partnerships and alternative management tools for many Forest Service functions, such as leasing grazing and minerals rights.

Fan, Zhenhong

TI Structural Change in Tail Behavior and the Asian Financial Crisis. **AU** Quintos, Carmela E.; Fan, Zhenhong; Phillips, Peter C. B.

Fantini, Marcella

TI The Response of Companies to Information-Based Environmental Policies. **AU** Siniscalco, Domenico; Borghini.

Stefania; Fantini, Marcella; Ranghieri, Federica.

TI The Response of Companies to Information-Based Environmental Polices. **AU** Siniscalco, Domenico; Borghini, Stefania; Fantini, Marcella; Ranghieri, Federica.

TI Why do Governments Sell Privatised Companies Abroad? **AU** Bortolotti, Bernardo; Fantini, Marcella; Scarpa, Carlo.

Farrow, Scott

PD December 1998. **TI** Using Environmental Benefit-Cost Analysis to Improve Government Performance. **AU** Farrow, Scott; Toman, Michael A. **AA** Farrow: Carnegie Mellon University. Toman: Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/11; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 19. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D61, H43, Q28. **KW** Cost-Benefit Analysis. Environmental Regulation. Regulatory Reform.

AB In this paper we first describe the legal and administrative basis of mandates that variously require and eschew economic measures for environmental management. We then summarize the steps involved in benefit-cost analysis and what can and cannot be accomplished with such information. Our basic conclusion is that while the approach is not perfect, benefit-cost analysis has a solid methodological footing and provides a valuable performance measure for an important governmental function, improving the well-being of society. However, benefit-cost analysis requires analytical judgements which, if done poorly, can obfuscate an issue or worse, provide a refuge for scoundrels in the policy debate. We conclude the paper with specific suggestions for both the everyday performance of benefit-cost analysis and its use in policy decision-making.

Farzin, Y. H.

PD January 2000. **TI** The Effects of Emissions Standards on Industry in the Short Run and Long Run. **AA** University of California, Davis. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/15; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 28. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D43, D62, H23, Q28. **KW** Environmental Standard. Abatement Cost. Demand Effect. Industry Output.

AB Industrialists often claim that, by rendering firms unprofitable and hence forcing them out of business, stricter emissions standards reduce the industry output and competition. This paper considers situations where firms' pollution reduction increases the industry demand, but because of inability to co-ordinate their emissions reductions, and thus free riding problem, they are unable to act in their own collective interest. For such situations, the paper studies the effects of emissions standards on the equilibrium in an oligopoly market both at the firm and industry level and in the long run as well as short run. It shows conditions under which a stricter standard leads to a larger number of firms in the industry, a greater industry output, and a lower total pollution in the long run; and to higher levels of firms' profits and output in the short run. It also shows that for the industry to survive, a minimum pollution standard may be necessary.

Fatas, Antonio

PD October 1999. **TI** Government Size and Automatic Stabilizers: International and Intranational Evidence. **AU** Fatas, Antonio; Mihov, Ilian. **AA** INSEAD. **SR** Centre for Economic Policy Research Discussion Paper: 2259; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 36. **PR** 5 pounds, \$8 or 8 euros. **JE** E60, F41. **KW** Fiscal Policy. Automatic Stabilizers. Business Cycles. Intranational Economics.

AB This paper studies the role of automatic stabilizers using a sample of OECD countries and US states and finding that there is a strong and robust negative correlation between measures of government size and the volatility of output. This correlation is robust to the inclusion of a large set of controls as well as to alternative methods of detrending and estimation. The economic significance of this relationship is larger for the US states.

Fauli-Oller, Ramon

PD January 2000. **TI** To Merge or to License: Implications for Competition Policy. **AU** Fauli-Oller, Ramon; Sandonis, Joel. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1284; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 15. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D43, D45, G34, L13, L41. **KW** Mergers. Licensing. Optimal Contracts. Competition Policy. Oligopoly.

AB The optimal merger policy when efficiency gains are not merger specific but can also be achieved through licensing is derived in a differentiated goods Cournot duopoly. We show that whenever both royalties and fees are feasible instruments to license technology, mergers should not be allowed, which fits the prescription of the U.S. Horizontal Merger Guidelines. When only one instrument is feasible, however, the possibility of licensing cannot be used as a definitive argument against mergers.

Favard, Pascal

PD January 2000. **TI** Does Productive Capital Affect the Order of Resource Exploitation? **AA** Universite des Sciences Sociales et LEERNA, France. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/02; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 13. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** Q31, Q32. **KW** Natural Resources. Substitute. Productive Capital. General Equilibrium.

AB The purpose of this paper is to show that in a general equilibrium framework it is never optimal to use high cost substitute after a lower cost exhaustible resource even if it is possible to accumulate productive capital. Indeed, if the high cost substitute is scarce it is always optimal to consume it simultaneously with a lower cost stock. Moreover it may be optimal to consume the high cost substitute before using a lower cost resource.

Faynzilberg, Peter S.

PD July 1999. **TI** Participation Rights and Mechanism

Design. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1279; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 40. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE C70, D71, D82, K10. KW Participation Rights. Voluntary Participation. Mechanism Design. Principal-Agent Models. Social Choice. AB This paper is concerned with the procedural aspects of collective choice and the impact of the parties' participation rights on the optimal mechanism. We find that the mechanism designer generally benefits from the selective engagement of the agents -- the exclusion of some agent types from the choice process. We show that optimization of mechanisms with voluntary participation involves two mutually dependent instruments: the scope of the agents' engagement, and the functional form of the social choice function. The benefits of selective engagement, as well as two optimization methodologies, are illustrated on principal-agent models. We find that the participation constraint is redundant and generally leads to suboptimal mechanisms. Contrary to its general interpretation, this restriction does not reflect the voluntary aspect of the agents' participation. Rather, it gives them an additional entitlement: to force their involvement in the collective choice. We formulate a free-exit constraint that is devoid of incentives and fully accounts for the voluntary aspect of participation. It also leads to an equivalent representation of incentive compatibility that explicates incentives and specifies the feasibility of a mechanism.

Fayolle, Jacky

TI Economic Consequences of Pension Reforms in Europe: An Investigation with the INGENUE World Model. AU Aglietta, Michel; Chateau, Jean; Fayolle, Jacky; Juillard, Michel; Le Cacheux, Jacques; Legarrec, Gilles; Touze, Vincent.

Federico, Giulio

PD May 2001. TI Domestic Petroleum Price Smoothing in Developing and Transition Countries. AU Federico, Giulio; Daniel, James A.; Bingham, Benedict. AA Federico: Oxford University. Daniel and Bingham: International Monetary Fund. SR International Monetary Fund Working Paper: WP/01/75; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 24. PR \$10.00. JE E64, O23, Q48. KW Oil Prices. Petroleum Prices. Price Stabilization. Hedging. AB This paper examines the case for government-led smoothing of domestic petroleum prices in the face of volatile international prices. Governments in most developing and transition countries engage in petroleum price smoothing, as the survey of country practice carried out for this paper shows. This paper reviews the potential welfare implications of petroleum price volatility, and assesses different price smoothing rules on the basis of historical oil prices. These simulations reveal the presence of a sharp trade-off between price smoothing and fiscal stability, suggesting that developing and transition country governments should engage in limited price smoothing and, if possible, rely on hedging instruments to do so.

Feltenstein, Andrew

PD August 2001. TI "Big Bang" Versus Gradualism in Economic Reforms: An Intertemporal Analysis with an Application to China. AU Feltenstein, Andrew; Nsouli, Saleh M. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/01/98; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 36. PR \$10.00. JE D58, P21. KW Transition. Reform Sequencing. Adjustment Speed. China. AB This paper reviews briefly the controversy in the literature concerning the speed of adjustment and sequencing of reforms, and presents a model parameterized with Chinese data. The model is used to generate different policy simulations to illustrate some of the key issues in the debate on the speed and sequencing of reforms, and not to provide a basis for policy recommendations for China. The simulations highlight the importance of the criteria being used for determining speed and sequencing. The paper also underscores the limitations involved in attempting to derive conclusion from the model, given the complexity of the issues.

Femminis, Gianluca

PD October 1999. TI On The Optimality of Risk-Sharing in Growth Models: The Role of Education. AA Universita Cattolica del Sacro Cuore. SR Centre for Economic Policy Research Discussion Paper: 2264; CEPR, 90- 98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 24. PR 5 pounds, \$8 or 8 euros. JE F40, O41. KW Endogenous Growth. Human Capital. Education. Risk-Sharing. AB While the "risk amelioration" literature suggests that risk sharing channels savings into risky but productive technologies and hence favors growth, models focused on precautionary savings reverse this conclusion. This paper presents a solution, by means of numerical techniques, of a model based on human capital accumulation through education, and finds that the increase in precautionary savings makes labor more productive in the goods sector and draws resources from education, which is the "growth leading" activity, thereby establishing a result favorable to financial integration, even in a model where precautionary savings play an important role.

PD October 1999. TI Monopolistic Competition, Dynamic Inefficiency and Asset Bubbles. AA Universita Cattolica del Sacro Cuore. SR Centre for Economic Policy Research Discussion Paper: 2272; CEPR, 90- 98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 32. PR 5 pounds, \$8 or 8 euros. JE O41. KW Dynamic Inefficiency. Asset Bubbles. Distortions. AB This paper emphasizes the importance of the market structure to determine whether dynamic inefficiency is possible in a closed economy. This is found by analyzing alternative monopolistic competition frameworks where the existence of some pure profit involves the presence of an asset market. When entry is blockaded, dynamic inefficiency is ruled out because every single firm uses a discount rate higher than the output growth rate to evaluate the stream of future profits. When entry is free but involves a sunk cost constant over time, we need to distinguish between the possibility of asset bubbles and dynamic inefficiency, the condition for the latter being more stringent. If the entry cost increases with productivity, dynamically inefficient equilibria are possible only when population grows.

Ferraro, Paul J.

PD July 2000. **TI** The Cost-Effectiveness of Conservation Payments. **AU** Ferraro, Paul J.; Simpson, R. David. **AA** Ferraro: Cornell University. Simpson: Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/31; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 26. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** F21, H21, H23, O19, Q28. **KW** Biodiversity. Conservation. Cost-Effectiveness. Incentives. Developing Countries.

AB Intact ecosystems provide important global services, but citizens in low-income countries -- where many valuable ecosystems are located -- cannot provide such goods gratis. International conservation and development donors have therefore invested in habitat conservation by encouraging commercial activities that produce ecosystem services as joint products. We find that it is more cost-effective to pay for conservation performance directly. Our model yields three conclusions. First, the overall cost of conservation is lowest under direct payments. Second, direct payments are more cost-effective for the donors. Third, even if the eco-entrepreneur prefers indirect subsidies, the direct approach is socially efficient and the donor can easily ascertain the appropriate payment. Although direct incentive programs may be difficult to implement, any approach to conservation faces similar challenges. Furthermore, we demonstrate with an empirical example the spectacular cost savings of direct payment initiatives. We find that continued experimentation with direct conservation incentives in the developing world is warranted.

Fielding, David

PD 2000. **TI** Is the Franc Zone an Optimal Currency Area? **AU** Fielding, David; Shields, Kalvinder. **AA** University of Leicester. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/03; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 27. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** F33, F42, O11, O23. **KW** Franc Zone. Optimal Currency Area. Structural VAR.

AB In this paper we modify the method of Blanchard and Quah (1989) in order to estimate a structural VAR model appropriate for a small open economy. In this way we identify shocks to output and prices in the members of the two monetary unions that make up the African CFA Franc Zone. The costs of monetary union membership will depend on the extent to which price and output shocks are correlated across countries, and the degree of similarity in the long run effects of the shocks on the macro-economy. The policy conclusions depend on the relative importance of different macroeconomic variables to policymakers, and the speed with which a policymaker is able to respond to a shock.

PD January 2001. **TI** Human Rights, Political Instability and Investment in South Africa: A Note. **AA** University of Nottingham and CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/2001/04; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 6. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** E22, O16. **KW** Investment. Social Capability. South Africa.

AB This paper extends the model of Fielding (1999), which

is designed to explain changes in investment in South Africa during the Apartheid period, by allowing a role for indicators of political instability and political and civil rights, as measured by Fedderke et al. (1999). The conclusions based on estimation of the original model are robust to the inclusion of the political factors, but these factors do explain some of the variation in investment over time.

PD January 2001. **TI** Why is Africa So Poor? A Structural Model of Growth and Income Inequality. **AA** University of Nottingham and CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/2001/05; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 18. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** I32, O15, O41, O47. **KW** Growth. Income Distribution. Social Development. Economic Development.

AB The paper extends existing work on inequality and economic development by estimating a cross-country structural model that identifies bi-directional relationships between income inequality and other indicators of social and economic development. Overall, lower inequality is associated with improvements in other development indicators, but this is the result of several complex interactions. The most striking feature of the structural model is the insight it provides into the reasons behind the negative "Africa dummy" in previous cross-country growth studies.

Fini, John N.

TI Can Power From Space Compete? **AU** Macauley, Molly K.; Darmstadter, Joel; Fini, John N.; Greenberg, Joel S.; Maulbetsch, John S.; Schaal, A. Michael; Styles, Geoffrey S. W.; Vedda, James A.

TI Can Power From Space Compete? **AU** Macauley, Molly K.; Darmstadter, Joel; Fini, John N.; Greenberg, Joel S.; Maulbetsch, John S.; Schaal, A. Michael; Styles, Geoffrey S. W.; Vedda, James A.

Fischer, Carolyn

TI How Important is Technological Innovation in Protecting the Environment? **AU** Parry, Ian W. H.; Pizer, William A.; Fischer, Carolyn.

PD October 1998. **TI** Instrument Choice for Environmental Protection When Technological Innovation is Endogenous. **AU** Fischer, Carolyn; Parry, Ian W. H.; Pizer, William A. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/04; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 32. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** Q28, O38, H23. **KW** Technological Innovation. Externalities. Environmental Policy. Welfare Impacts.

AB This paper presents an analytical and numerical comparison of the welfare impacts of alternative instruments for environmental protection in the presence of endogenous technological innovation. We analyze emissions taxes and both auctioned and free (grandfathered) emissions permits. We find that under different sets of circumstances each of the three policies may induce a significantly higher welfare gain than the other two policies. In particular, the relative ranking of policy instruments can crucially depend on the ability of adopting firms to imitate the innovation, the costs of innovation, the

slope and level of the marginal environmental benefit function, and the number of firms producing emissions. Moreover, although in theory the welfare impacts of policies differ in the presence of innovation, sometimes these differences are relatively small. In fact, when firms anticipate that policies will be adjusted over time in response to innovation, certain policies can become equivalent. Our analysis is simplified in a number of respects; for example, we assume homogeneous and competitive firms. Nonetheless, our preliminary results suggest there is no clear-cut case for preferring any one policy instrument on the grounds of dynamic efficiency.

PD April 1999. **TI** Read This Paper Later: Procrastination with Time-Consistent Preferences. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/19; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 32. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D81, D91, J22, Q39. **KW** Procrastination. Natural Resource Economics. Rational Behavior. Labor Supply. Decision-Making.

AB A model of time-consistent procrastination is developed to assess the extent to which the observed behavior is compatible with rational behavior. When a finite work requirement must be completed by a deadline, the remaining time for leisure is an exhaustible resource. With a positive rate of time preference, the optimal allocation of this resource results in more hours spent working (and fewer in leisure) the closer the deadline. Key qualitative findings of psychological studies of academic procrastination are consistent with the standard natural resource management principles implied by the model, when suitably adapted to task aversiveness, uncertainty, and multiple deadlines. However, quantitatively, the fully rational model requires an extremely high rate of time preference or elasticity of intertemporal substitution to generate serious procrastination; furthermore, it cannot explain undesired procrastination. A companion paper, "Read This Paper Even Later: Procrastination with Time-Inconsistent Preferences" analyzes the extent to which alternative time discounting preferences can better explain such impatience and address the issue of self-control failures.

PD April 1999. **TI** Read This Paper Even Later: Procrastination with Time-Inconsistent Preferences. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/20; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 38. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D91, J22, J31, Q39. **KW** Procrastination. Natural Resource Economics. Hyperbolic Discounting. Differential Discounting. Labor Supply.

AB Studies suggest that people are rational about their future behavior but have difficulty influencing it to conform to current preferences. Salience costs and imperfect foresight have been used to explain procrastination, but the fully rational model requires a high rate of time preference or elasticity of intertemporal substitution and cannot explain undesired procrastination at all. I investigate how dynamically inconsistent preferences can address the issue of self-control failures. Two types of discount functions are presented. Hyperbolic discounting corresponds to a salient present: short-term discount rates are higher than long-term ones. Differential discounting arises from salient costs; utility from leisure is discounted at a higher rate than rewards from work. Both

induce self-control problems but have different implications for policies to induce work, reduce procrastination, and improve welfare. Hyperbolic discounters can be made better off if compelled to reduce procrastination; differential discounters have to be compensated to perform more work earlier.

Fontagne, Lionel

PD October 2001. **TI** International Trade and Rent Sharing in Developed and Developing Countries. **AU** Fontagne, Lionel; Mirza, Daniel. **AA** Fontagne: CEPII. Mirza: Universite Paris I Pantheon Sorbonne. **SR** CEPII Working Paper: 2001/09; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 23. **PR** no charge. **JE** F10, J30, L10. **KW** Liberalization. Openness. Rent Sharing. Wages. Mark-Ups.

AB This paper derives and tests a theoretical equation based on rate sharing theories, linking industry wages to openness variables. This relation has three main features: it can be easily confronted to the data; it allows for both impacts of import and export variables to be properly considered in a same testable wage equation; it stresses the role of imperfect market structures of goods and labor, as well as their interaction, when studying wages' response to openness. The dataset provides data for trade, activity and labor, for 29 industries and 65 countries from 1981 to 1997. For the OECD countries, an increase in exports and domestic market shares is associated with growth in wages in roughly half of the industries. Mediterranean, followed by Latin American, countries are the less developed countries where such phenomenon of rent-sharing can be observed. This seems not to be the case in Asia.

PD October 2001. **TI** A First Assessment of Environment-Related Trade Barriers. **AU** Fontagne, Lionel; von Kirchbach, Friedrich; Mimouni, Mondher. **AA** Fontagne: CEPII. von Kirchbach and Mimouni: International Trade Center-UNCTAD-WTO. **SR** CEPII Working Paper: 2001/10; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 18. **PR** no charge. **JE** F13, F18, Q01. **KW** Trade Policy. Environment. Protectionism. Sanitary and Phytosanitary Systems (SPS). Tri Butyl Tin (TBT).

AB International trade can affect the environment in different ways. This may justify the introduction of border measures by the importing countries. However, abuse of environmental arguments for protectionist reasons is likely. In order to disentangle protectionism from dispositions justified on the grounds of true environmental concerns, we systematically review notifications of all importing countries of the 5000 products traded at the world level. We find that 88% of world trade is potentially affected, while half of world imports potentially are subject to a protectionist use of such measures. Agriculture, the automobile industry, the pharmaceutical industry and many other sectors are concerned. Less developed countries' (LDCs') exporters are the countries most affected by these new trade policies.

Forbes, Catherine S.

PD April 2000. **TI** Bayesian Soft Target Zones. **AU** Forbes, Catherine S.; Kofman, Paul. **AA** Forbes: Monash University. Kofman: University of Technology, Sydney. **SR** Monash Department of Econometrics and Business Statistics Working Paper: 00/04; Department of

Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/. PG 23. PR no charge. JE C11, C13, F31, F33. KW Bayesian Estimation. Griddy-Gibbs Sampler. Credible Target Zones. Soft Margins. European Monetary System.

AB Several authors have postulated econometric models for exchange rates restricted to lie within known target zones. However, it is not uncommon to observe exchange rate data with known limits that are not fully "credible"; that is, where some of the observations fall outside the stated range. An empirical model for exchange rates in a soft target zone where there is a controlled probability of the observed rates exceeding the stated limits is developed in this paper. A Bayesian approach is used to analyze the model, which is then demonstrated on German mark-French franc and ECU-French franc exchange rate data.

TI Implicit Bayesian Inference Using Option Prices. AU Martin, Gael M.; Forbes, Catherine S.; Martin, Vance L.

PD August 2000. TI Bayesian Exponential Smoothing. AU Forbes, Catherine S.; Snyder, Ralph D.; Shami, Roland G. AA Monash University. SR Monash Department of Econometrics and Business Statistics Working Paper: 00/07; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/. PG 21. PR no charge. JE C11, C22, C51. KW Time Series Analysis. Forecasting. Structural Model. Local Level Model. Prediction Intervals.

AB In this paper, a Bayesian version of the exponential smoothing method of forecasting is proposed. The approach is based on a state space model containing only a single source of error for each time interval. This model allows us to improve current practices surrounding exponential smoothing by providing both point predictions and measures of the uncertainty surrounding them. We therefore propose a method for calculating prediction distributions via Monte Carlo composition. We evaluate the method with a Monte Carlo simulation study and then apply it to forecasting car part demand. The main advantage of the approach is that it produces exact, small sample prediction distributions. It also works very quickly on modern computing machines.

TI A Structural Time Series Model with Markov Switching. AU Shami, Roland G.; Forbes, Catherine S.

TI Understanding the Kalman Filter: An Object Oriented Programming Perspective. AU Snyder, Ralph D.; Forbes, Catherine S.

Forman, Chris

TI Reciprocity and the Costs of Authority Relationships. AU Al-Najjar, Nabil I.; Forman, Chris.

Forni, Lorenzo

TI The Adequacy of Life Insurance: Evidence from the Health and Retirement Survey. AU Bernheim, B. Douglas; Forni, Lorenzo; Gokhale, Jagadeesh; Kotlikoff, Laurence J.

Forslid, Rikard

PD September 1999. TI A U-Shaped Europe? A Simulation Study of Industrial Location. AU Forslid, Rikard; Haaland, Jan I.; Knarvik, Karen-Helene Midelfart

AA Forslid: Stockholm University. Haaland and Knarvik: Norwegian School of Economics and Business Administration. SR Centre for Economic Policy Research Discussion Paper: 2247; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG not available. PR 5 pounds, \$8 or 8 euros. JE C68, F12, F15, R12. KW Economic Integration. Agglomeration. Economic Geography.

AB This paper uses a full-scale CGE-model -- calibrated on 1992 data -- to investigate the effects of European integration on the location of industrial production. Results reveal large differences among individual industries. Industries with high scale elasticities typically display a non-monotonous relationship between trade liberalization and concentration, with maximal concentration for intermediate trade costs. Other industries, more driven by comparative advantage, become more and more concentrated as trade costs are lowered. On the aggregate European level findings indicate an (inverse) U-shaped relation between trade costs and concentration, with Europe 1992 close to the peak of concentration. The results also show a close correlation between real income gains and growth in manufacturing production; we label this an "externality shifting" effect -- gains from pecuniary externalities in the manufacturing sectors. Finally, we note that nominal factor prices co-vary as regions specialize, while in relative terms there are traces of the Stolper-Samelson theorem.

Fortin, Nicole M.

TI Occupational Gender Composition and Wages in Canada: 1987-1988. AU Baker, Michael; Fortin, Nicole M.

Foucault, Thierry

TI Imperfect Market Monitoring and SOES Trading. AU Roëll, Ailsa A.; Foucault, Thierry; Sandas, Patrik

Fouquin, Michel

PD November 2001. TI Sector Sensitivity to Exchange Rate Fluctuations. AU Fouquin, Michel; Sekkat, Khalid; Mansour, Malek J.; Mulder, Nanno; Nayman, Laurence. AA Fouquin, Mulder, and Nayman: CEPIL. Sekkat and Mansour: Université Libre de Bruxelles. SR CEPII Working Paper: 2001/11; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. PG 92. PR no charge. JE F14, F31, F40. KW Exchange Rates. Euro. Manufacturing Sector.

AB This study focuses on the impact of the euro/dollar fluctuations on the European manufacturing sector. It tries to classify European industries according to the exposure to competition from the dollar zone and to their sensitivity to exchange rate fluctuations. Combining the results of the two classifications, sectors which may be highly affected by the euro/dollar fluctuations are identified. The study shows strong asymmetries among European countries. To estimate sectors' sensitivity to exchange rate fluctuations, the regression relates trade volumes to exchange rate, cost and market structure variables. The estimation results show that cost considerations and exchange rates are important determinants of trade. The impact of exchange rate changes on trade varies across sectors. They are explained both by concentration on the supply side, and dynamics on the demand side.

Francq, Christian

TI Non Redundancy of High Order Moment Conditions for Efficient GMM Estimation of Weak AR Processes. **AU** Broze, Laurence; Francq, Christian; Zakoian, Jean-Michel.

Fratantoni, Michael

PD December 1999. **TI** Monetary Policy, Housing Investment, and Heterogeneous Regional Markets. **AU** Fratantoni, Michael; Schuh, Scott. **AA** Fratantoni: Fannie Mae. Schuh: Federal Reserve Bank of Boston. **SR** Federal Reserve Bank of Boston Working Paper: 00/01; Research Library, Federal Reserve Bank of Boston, P.O. Box 2076, Boston, MA 02106-2076. **Website:** www.bos.frb.org/economic/wpchrono.htm. **PG** 49. **PR** no charge. **JE** E22, E52, R21, R31. **KW** Monetary Policy. Housing Investment.

AB This paper quantifies the importance of heterogeneity in regional housing markets for the conduct of monetary policy using a new model called an aggregation VAR (AVAR). The model integrates a national financial market with regional housing markets, imposing all exact aggregation conditions. Monetary policy is transmitted to the real economy through the mortgage rate. The AVAR model is based on linear VARs, but its aggregate impulse responses exhibit two nonlinearities: (1) time variation stemming from aggregation over heterogeneous regions, and (2) state dependence on initial economic conditions in regions. Thus, the effect of monetary policy on the real economy depends on the extent and nature of regional heterogeneity, which vary over time. Using longitudinal data for detailed U.S. regions, we estimate the effects of time variation and state dependence on the dynamic responses of the AVAR model. These estimates, and aggregation bias, provide plausible and tangible explanations for "long and variable" lags in monetary policy. As an example, we show how the AVAR model can simulate the effects of coastal housing booms on the efficacy of monetary policy.

Frederick, Kenneth D.

PD May 2000. **TI** Socioeconomic Impacts of Climate Variability and Change on U.S. Water Resources. **AU** Frederick, Kenneth D.; Schwarz, Gregory E. **AA** Frederick: Resources for the Future. Schwarz: U.S. Geological Survey. **SR** Resources for the Future Discussion Paper: 00/21; 1616 P Street, NW, Washington, DC 20036. **Website:** www.rff.org. **PG** 87. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D61, Q25, Q28. **KW** Water. Climate Change. Socioeconomic Impacts. Water Management. Cost-Benefit Analysis.

AB The socioeconomic costs of floods, droughts, and water scarcity from 2030 to 2095 are examined under three climate scenarios: continuation of the current climate, and two climate-change scenarios based on the Canadian and Hadley models. Measures of the adequacy of water supplies are developed for the coterminous United States. Infrastructure and institutions, water management practices, conservation opportunities, and the economy are among the factors taken into account. The impacts of climate change are calculated, and the costs and benefits are estimated under three alternative management strategies. The results support several conclusions. First, greenhouse warming could have major impacts on the costs of floods, droughts, and balancing water demand and

supply. Second, the contrasting hydrologic implications of the two climate models indicate that both the magnitude and the direction of these impacts are uncertain and may vary significantly among regions. Third, there are many opportunities to adapt to changing hydrologic conditions.

TI Impacts of Federal Policies and Programs on Wetlands. **AU** Crosson, Pierre; Frederick, Kenneth D.

Freeman, Richard B.

PD February 2000. **TI** Single Peaked Vs. Diversified Capitalism: The Relation Between Economic Institutions and Outcomes. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7556; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. **Website:** www.nber.org. **PG** 31. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** N10, O57, P17. **KW** Capitalism.

AB Capitalist countries have historically had quite different labor market institutions and social policies. Do these differences produce sufficiently different economic outcomes to identify a single peak set of institutions? This paper shows that: 1. Labor market institutions have large effects on distribution, but modest hard-to-uncover effects on efficiency. 2. Institutional diversity is increasing among advanced countries, as measured by the percentage of workers covered by collective bargaining. 3. The case for the US having the institutions for peak economy status rests on its 1990s full employment experience, which arguably counterbalances its high level of economic inequality. The historical pattern whereby some capitalist countries do better than others in some periods (i.e. Japan in the 1970s-1980s), then run into problems is more consonant with the view that capitalism permits national differences in institutions to persist than with the view that all economies must converge to a single institutional structure.

Freixas, Xavier

PD September 1999. **TI** Optimal Bail-Out, Conditionality and Creative Ambiguity. **AA** Universitat Pompeu Fabra. **SR** Centre for Economic Policy Research Discussion Paper: 2238; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. **Website:** www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** E58, G18, G20. **KW** Creative Ambiguity. Conditionality. Lender of Last Resort. Too Big To Fail Policy.

AB This paper addresses the optimal behavior of the Lender of Last Resort (LOLR) in its microeconomic role toward individual financial institutions in distress. It has been argued that the LOLR should not intervene at the macroeconomic level and let any defaulting institution face the market discipline, as it will be confronted with the consequences of the risks it has taken. A simple cost benefit analysis shows that this position may lack a sufficient foundation and that rather, under reasonable assumptions, the optimal policy has to be conditional on the amount of uninsured debt issued by the defaulting bank. Yet in equilibrium, because the rescue policy is costly, the LOLR will not rescue all the banks that fulfill the uninsured debt requirement condition, but will follow a mixed strategy. This we interpret as the confirmation of the "creative ambiguity" principle, perfectly in line with the central bankers' claim that it is efficient for them to have discretion in lending to individual institutions. Alternatively, in other cases, when the social cost of a bank's bankruptcy is too high, it is optimal for

the LOLR to bail out the institution, and this gives support to the "too big to fail" policy.

French-German Economic Forum

PD July 2001. **TI** EU-Labour Markets Pension Reforms between Economic and Political Problems. **AA** not available. **SR** CEPII Working Paper: 2001/05; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 45. **PR** no charge. **JE** H55, J10, J26. **KW** Associated Countries. Yugoslavia. Demographics. Aging Economics. Pension Funds.

AB The Forum assembles professional economists from academia, business and the public sector. As a non-partisan institution, the Forum brings together participants from all strands of thinking about economic policy with the aim of stimulating fruitful debate. Each meeting is devoted to one or two major policy issues: employment, exchange rate policies, the organization of economic policy in Economic and Monetary Union, its relations with non-participating countries, and the immediate policy challenges on the eve of monetary union, to name just a few. The Forum commissions papers to provide an informed basis for the discussion, but the focus is on debate and the exchange of views, starting with reactions from discussants whose role is to present alternative views and to frame the key issues for the debate.

PD November 2001. **TI** Political Economy of the Nice Treaty: Rebalancing the EU Council and The Future of European Agricultural Policies. **AA** not available. **SR** CEPII Working Paper: 2001/12; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 46. **PR** no charge. **JE** E42, F02, H87. **KW** Monetary Union. Transparency. European Union.

AB Together with other members of the European Union, France and Germany are about to embark on an unprecedented cooperative venture. To be successful, Economic and Monetary Union will require a very high degree of mutual understanding among the policymakers of the participating countries. It will also require upgrading the dialogue between those who contribute to shaping the policy debates on both sides of the Rhine. France and Germany have a long tradition of high-level dialogue and cooperation in the framework of bilateral and European institutions. But the dialogue between their civil societies does not match this spirit of cooperation. Economists and those involved in practical economic policy making from both countries in particular rarely talk to each other to find out why they may have differing visions of the functioning of Economic and Monetary Union and of the associated challenges, and even more rarely try to narrow the divergence of their views. This lack of dialogue contributes to keeping alive entrenched prejudices on the other country's supposedly hidden policy agenda.

Friebel, Guido

TI Teamwork Management in an Era of Diminishing Commitment. **AU** Auriol, Emmanuelle; Friebel, Guido; Pechlivanos, Lambros.

Fuchs, Victor R.

PD October 1999. **TI** The Future of Health Economics. **AA** Stanford University and NBER. **SR** National Bureau of Economic Research Working Paper: 7379; National Bureau

of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 22. **PR** \$5.00. **JE** A12, I11, I12, I18. **KW** Health. Behavioral Science. Public Policy.

AB This paper discusses health economics as a behavioral science and as input into health policy and health services research. I illustrate the dual role with data on publications and citations of two leading health economics journals and three leading American health economists. Five important, relatively new topics in economics are commended to health economists who focus on economics as a behavioral science. This is followed by suggestions for health economists in their role of providing input to health policy and health services research. I discuss the strengths and weaknesses of economics, the role of values, and the potential for interdisciplinary and multidisciplinary research. The fourth section presents reasons why I believe the strong demand for health economics will continue, and the paper concludes with a sermon addressed primarily to recent entrants to the field.

Galeotti, Marzio

PD November 1999. **TI** Richer and Cleaner? A Study on Carbon Dioxide Emissions in Developing Countries. **AU** Galeotti, Marzio; Lanza, Alessandro. **AA** Galeotti: University of Bergamo and Fondazione Eni Enrico Mattei. Lanza: International Energy Agency. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 99/87; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 22. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C12, C23, O13, Q32. **KW** Environment. Growth. CO2 Emissions. Panel Data.

AB The Climate Change debate has drawn attention to the problem of greenhouse gas emissions into the atmosphere. One of the most important issues in the policy debate is the role that should be played by developing countries in joining the commitment of developed countries to reduce GHG emissions, and particularly CO2 emissions. This debate calls into play the relationship between energy consumption, CO2 emissions and economic development. In this paper we use a panel data model for 110 world countries to estimate the relationship between CO2 emissions and GDP and to produce emission forecast. The paper contains three major results: (i) the empirical relationship between carbon dioxide and income is well described by non linear Gamma and Weibull specifications as opposed to more usual linear and log-linear functional forms; (ii) our single equation reduced form model is comparable in terms of forecasted emissions with other more complex, less data driven models; (iii) despite the decreasing marginal propensity to pollute, our forecasts show that future global emissions will rise. The average world growth of CO2 emissions between 2000 and 2020 is about 2.2% per year, while that of Non Annex 1 countries is posted at 3.3% per year.

Galetovic, Alexander

TI Investment Banking and Security Market Development: Does Finance Follow Industry? **AU** Anand, Bharat N.; Galetovic, Alexander.

Gali, Jordi

PD February 2000. **TI** Inflation Dynamics: A Structural Econometric Analysis. **AU** Gali, Jordi; Gertler, Mark. **AA** Gali: Universitat Pompeu Fabra, National Bureau of

Economic Research, and New York University. Gertler: New York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7551; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 20. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside US). **JE** E31. **KW** Prices. Inflation. Phillips Curve. Real Marginal Cost.

AB This paper develops and estimates a structural model of inflation that allows for a fraction of firms that use a backward looking rule to set prices. The model nests the purely forward-looking New Keynesian Phillips curve as a particular case. Measures of marginal cost are used as the relevant determinant of inflation, rather than an ad-hoc output gap. Real marginal costs are a significant and quantitatively important determinant of inflation. Backward looking price setting, while statistically significant, is not quantitatively important. The conclusion is that the New Keynesian Phillips curve provides a good first approximation to the dynamics of inflation.

PD September 1999. **TI** Inflation Dynamics: A Structural Economic Analysis. **AU** Gali, Jordi; Gertler, Mark. **AA** Gali: Universitat Pompeu Fabra. Gertler: New York University. **SR** Centre for Economic Policy Research Discussion Paper: 2246; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 36. **PR** 5 pounds, \$8 or 8 euros. **JE** E31. **KW** Inflation. Prices. Phillips Curve. Real Marginal Cost.

AB This paper develops and estimates a structural model of inflation that allows for a fraction of firms that use a backward looking rule to set prices. The model nests the purely forward-looking New Keynesian Phillips curve as a particular case. Measures of marginal cost are used as the relevant determinant of inflation, rather than an ad-hoc output gap. Real marginal costs are a significant and quantitatively important determinant of inflation. Backward looking price setting, while statistically significant, is not quantitatively important. The conclusion is that the New Keynesian Phillips curve provides a good first approximation to the dynamics of inflation.

Gambolati, Giuseppe

TI The Impact of Climate Change, Sea-Storm Events and Land Subsidence in the Adriatic. **AU** Teatini, Pietro; Gambolati, Giuseppe.

Garibaldi, Pietro

PD September 2000. **TI** Severance Payments in Search Economies with Limited Bonding. **AU** Garibaldi, Pietro; Violante, Giovanni L. **AA** Garibaldi: Bocconi University and CEPR. Violante: University College London and CEPR. **SR** University College London Discussion Papers in Economics: 2000/09; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 16. **PR** 4 pounds or \$8.00. **JE** E24, J63, J64, J65, J68. **KW** Search Theory. Severance Payments. Unemployment. Firing Taxes. Turnover.

AB Whereas the existing literature models Employment Protection Legislation (EPL) as a firing tax on labor shedding, this paper studies qualitatively and quantitatively the macroeconomic effects of severance payments (pure transfers) between employer and dismissed employees. First, it shows that the transfer component of existing EPL largely dominates the tax component. Second, it shows that the theoretical

distinction between tax and transfer is important: in a search economy where bonding is limited by a minimum wage constraint, a rise in severance payments increases unemployment duration, with ambiguous effects on turnover; the opposite of what happens when firing taxes are increased. Third, when the model is calibrated to the Italian economy, it appears that a reduction of severance payments is likely to be more beneficial (in terms of unemployment and its duration) than a decrease in the firing tax. Overall, this paper argues that the emphasis of the theoretical and empirical literature should shift from the analysis of firing taxes to that of severance payments with limited bonding.

Garmon, Christopher

PD December 1999. **TI** Complements Integration and Leverage: The Case of the Middleman. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 229; 600 Pennsylvania Avenue, NW, Washington, DC 20580. Website: bperson@ftc.gov. **PG** 21. **PR** no charge. **JE** D42, K21, L12, L42, L92. **KW** Vertical Integration. Quantity-Dependent Pricing. Trucking. Monopoly.

AB In some cases, complementary products are sold to different sets of agents to aid in transactions between them. In the context of a simplified model, this paper shows that a monopolist has an incentive to integrate into and foreclose other sellers of a complementary product used in fixed proportions with the monopolized product, but which is sold to different consumers. While these latter consumers are made worse off by integration and leverage, output is expanded and the monopolist's original consumers are made better-off. The effect of integration and leverage on overall welfare is uncertain. I illustrate this model with an example involving trucking fleet cards (sold to trucking companies) and fuel desk point-of-sale systems (sold to truck stops) that are used in conjunction when diesel fuel is purchased.

Garrod, Guy D.

PD January 2000. **TI** Estimating the Benefits of Traffic Calming on Through Routes: A Choice Experiment Approach. **AU** Garrod, Guy D.; Scarpa, Riccardo; Willis, Ken G. **AA** Garrod and Willis: University of Newcastle upon Tyne. Scarpa: Università della Toscana. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/07; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 28. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C25, D62, H41, Q38. **KW** Choice Experiments. Local Public Goods Valuation. Cost-Benefit Analysis. Discrete-Choice Models.

AB Excessive speed is a major contributory factor in a large proportion of deaths and serious injuries on British roads. One approach to tackling the speeding problem is the use of traffic calming measures as a means of enforcing speed restrictions along roads running through populated areas. But speed reduction is only one of the benefits of traffic calming. This paper reports the results of a series of choice experiments that were used to investigate the willingness to pay (WTP) of a sample of local residents in three English towns for traffic calming measures that would achieve a range of reductions in speed, noise and community severance. Utility difference indices are estimated from logit models based on responses to the choice experiments. These revealed that local people had a positive WTP for a reduction in the negative impacts of road

traffic and for more attractive, rather than basic, designs of the traffic calming measures. Some specifications of the logit model corroborate the hypothesis that WTP for reducing the negative impacts of traffic calming is lower for local households living outside visible and audible range of the road.

Gary-Bobo, Robert J.

TI On the Optimal Number of Representatives. AU Auriol, Emmanuelle; Gary-Bobo, Robert J.

Gaulier, Guillaume

PD November 2000. TI The Convergence of Automobile Prices in the European Union: An Empirical Analysis for the Period 1993-1999. AU Gaulier, Guillaume; Haller, Severine. AA Gaulier: CEPII. Haller: University of Paris I Pantheon-Sorbonne. SR CEPII Working Paper: 2000/17; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. PG 21. PR no charge. JE C23, F02, L62. KW Automobile Market, European. Price Convergence. AB Over the last decade, the EC automobile market has been the scene of significant price differentials for the same vehicle across the member states. The move towards a more integrated internal market, since January 1993, obviously calls for more up-to-date empirical information. This paper provides an analysis of price convergence over the period 1993-1999 for EU countries. Car characteristics were collected to build aggregate prices for countries thanks to a quasi-hedonic econometric model. Price dynamic is analyzed through Sigma and Beta convergence. We found that Sigma convergence is impeded by exchange rates fluctuations, while there is a strong force driving Beta convergence. The Euro should then favor convergence.

PD March 2001. TI Discrimination commerciale: une mesure a partir des flux bilateraux. AA CEPII. SR CEPII Working Paper: 2001/04; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. PG 50. PR no charge. JE C23, F13, F14, 057. KW Trade Protection. Trade Openness. Market Access. Growth.

AB Multilateral trade rounds have led to cuts in tariff barriers that have often given way to non-tariff barriers, difficult to quantify. This research sets out an indirect way for measuring such obstacles to trade, based on an evaluation of trade discrimination defined as the de facto inequality of access for a given product in a given market. The distribution of trade flows is measured by the relative intensity indicator which is the ratio of the observed trade flows to theoretical flows. The latter are determined by the geographical distribution of world trade according to the relative importance of exporters and importers respectively. Discrimination is calculated as a weighted average of the relative intensity factors. The indicator is corrected for the impact of geographical distances as well as differences in country size, as, ceteris paribus, the imports of small countries are more discriminatory than those of large countries. The results are globally consistent with those obtained with alternative indicators. However, our indicator covers a much larger field (sectoral and time dimensions) than its competitors. Paper available in French only.

TI The Nature of Specialization Matters for Growth: An Empirical Investigation. AU Bensidoun, Isabelle; Gaulier, Guillaume; Unal-Kesenci, Deniz.

Gaynor, Martin

TI Enter at Your Own Risk: HMO Participation and Enrollment in the Medicare Risk Market. AU Abraham, Jean; Arora, Ashish; Gaynor, Martin; Wholey, Douglas.

Gerlach, Stefan

PD October 1999. TI The Taylor Rule and Interest Rates in the EMU Area. AU Gerlach, Stefan; Schnabel, Gert. AA Bank for International Settlements. SR Centre for Economic Policy Research Discussion Paper: 2271; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 16. PR 5 pounds, \$8 or 8 euros. JE E5. KW European Central Bank. Taylor Rule. AB This paper demonstrates that average interest rates in the EMU countries in 1990-98, with the exception of the period of exchange market turmoil in 1992-93, moved very closely in relation to average output gaps and inflation as suggested by the Taylor rule.

Germano, Fabrizio

TI A Comparison of Standard Multi-Unit Auctions with Synergies. AU Albano, Gian Luigi; Germano, Fabrizio; Lovo, Stefano.

Gertler, Mark

PD February 2000. TI The Information in the High Yield Bond Spread for the Business Cycle: Evidence and Some Implications. AU Gertler, Mark; Lown, Cara S. AA Gertler: New York University and National Bureau of Economic Research. Lown: Federal Reserve Bank of New York. SR National Bureau of Economic Research Working Paper: 7549; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. PG 24. PR \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). JE E37, E44. KW Business Cycles. Monetary Policy. Economic Indicators. Bonds.

AB The market for high yield (below investment-grade) corporate bonds developed in the middle 1980s. Since then, the high yield spread has had significant explanatory power for the business cycle. We interpret this finding as possibly symptomatic of financial factors at work in the business cycle, along the lines suggested by the financial accelerator. We also show that over this period the high yield spread outperforms other leading financial indicators, including the term spread, the paper-bill spread and the Federal Funds rate. We conjecture that changes in the conduct of monetary policy over time may account for the reduced informativeness of these alternative indicators, all of which are tied closely to monetary policy.

TI Inflation Dynamics: A Structural Econometric Analysis. AU Gali, Jordi; Gertler, Mark.

TI Inflation Dynamics: A Structural Economic Analysis. AU Gali, Jordi; Gertler, Mark.

Giot, Pierre

PD September 2000. TI Intraday Value-At-Risk. AA Maastricht University and CORE. SR Universite Catholique de Louvain, CORE Discussion Paper: 2000/45; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 20. PR \$100 per year. JE C22, C41, C53, G11.

G12. **KW** Intraday Volatility. Value-at-Risk. Duration Models. Portfolio Choice. Asset Pricing.

AB In this paper, we apply a collection of parametric (Normal, Normal GARCH, Student GARCH, RiskMetrics and high-frequency duration models) and nonparametric (empirical quantile and extreme distributions models) Value-at-Risk (VaR) techniques to intraday data for three stocks traded on the New York Stock Exchange. Because of the small time horizon of the intraday returns (15 and 30 minute returns), intraday VaR can be useful to market participants (traders, market makers) involved in frequent trading. As expected, the volatility features an important intraday seasonality, which must be removed prior to using the VaR models. The estimation and assessment of the VaR techniques indicate that the data displays a high kurtosis (fat tails), and that VaR models should take this important feature into account. More particularly, Student GARCH, empirical quantile and extreme distributions models perform relatively well.

Gokhale, Jagadeesh

PD September 1999. **TI** Social Security's Treatment of Postwar Americans: How Bad Can it Get? **AU** Gokhale, Jagadeesh; Kotlikoff, Laurence J. **AA** Gokhale: Federal Reserve Bank of Cleveland. Kotlikoff: Boston University and NBER. **SR** National Bureau of Economic Research Working Paper: 7362; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** \$5.00. **JE** H55. **KW** Social Security. OASI. Public Pensions.

AB Of every dollar postwar Americans have earned or will earn over their lifetimes, over 5 cents will be lost to the Old Age Survivor Insurance System (OASI) in the form of payroll taxes paid in excess of benefits received. Viewed as an insurance company, the insurance OASI sells is no bargain. These findings, developed in an extensive micro simulation study by Caldwell, et al. (1999), assume that current law can be maintained through time. But Social Security faces a staggering long-term funding problem. This paper uses the machinery developed in Caldwell, et al. to consider Social Security's treatment of postwar Americans under alternative tax increases and benefit cuts that would help bring the system's finances into present value balance. The alternatives include immediate tax increases, eliminating the ceiling on taxable payroll, immediate and sustained benefit cuts, increasing the system's normal retirement ages beyond those currently legislated, switching from wage to price indexing in calculating benefits, and limiting the price indexation of benefits. The choice among these and other alternatives have important consequences for which postwar generations and which members of those generations will be forced to pay for the system's long-term financing problems.

TI The Adequacy of Life Insurance: Evidence from the Health and Retirement Survey. **AU** Bernheim, B. Douglas; Forni, Lorenzo; Gokhale, Jagadeesh; Kotlikoff, Laurence J.

TI The Adequacy of Life Insurance: Evidence from the Health and Retirement Survey. **AU** Bernheim, B. Douglas; Forni, Lorenzo; Gokhale, Jagadeesh; Kotlikoff, Laurence J.

Goldman, Eitan

PD March 2000. **TI** The Visible Hand, the Invisible Hand and Efficiency. **AU** Goldman, Eitan; Gorton, Gary. **AA** Goldman: University of North Carolina. Gorton:

University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7587; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 38. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** D21, G30. **KW** Firm Behavior. Corporate Finance. Market Prices.

AB When a firm forms a market closes. Resources that were previously allocated via the price system are allocated by managerial authority within the firm. This paper explores this choice of organizational form using a model of price formation in which agents negotiate prices on behalf of their principals when there is trade in a market. Principals motivate agents to make efforts and form prices by writing contracts contingent on the prices that the agents themselves negotiate. Admitting agency issues into price formation introduces a need for a principal to have the authority to coordinate economic activity. This can be achieved by closing a market and forming a firm, thereby contracting directly with both agents, and centrally directing trade. Closing a market, however, results in a loss of information from market prices, information that can be used to reduce the cost of contracting. This information cannot be replicated by internally generated "transfer prices." Hence, when the market is internalized within the firm, information from market prices is lost. Choice of organizational form, a market or a firm, is then determined by the relative value of central authority over agents (the "visible" hand) versus information from market prices (the "invisible" hand).

Gollier, Christian

PD November 1999. **TI** Time Horizon and the Discount Rate. **AA** University of Toulouse and Institut Universitaire de France. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 99/88; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 21. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D81, D91, Q25, Q28. **KW** Discounting. Uncertain Growth. Prudence. Long Term.

AB We discuss the selection of the socially efficient discount rate for public investment projects that entail costs and benefits in the far distant future. We show that the discount rate should be a decreasing function of time horizon under some specific restrictions on the distribution of uncertain growth and on preferences. We consider a logarithmic random walk for consumption. The benchmark result is that, in the absence of any risk of recession, the yield curve is decreasing if relative risk aversion is decreasing. Relaxing the assumption on the absence of recession requires more restrictions on preferences, as increasing relative prudence.

Gorton, Gary

TI The Visible Hand, the Invisible Hand and Efficiency. **AU** Goldman, Eitan; Gorton, Gary.

Gottinger, Hans W.

PD April 2000. **TI** Negotiation and Optimality in an Economic Model of Global Climate Change. **AA** International Institute for Environmental Economics and Management (IIEEM). **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/18; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 24. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D61, H43, Q31, Q38.

KW Climate Change. Global Optimum.

AB We suggest a two-country, two-sector model as a basis for the control of global climate change in which the dynamic time path of the world economy is analyzed under the provision that the outcomes of a negotiation game generate the global optimal solution.

Goulder, Lawrence H.

TI Neutralizing the Adverse Industry Impacts of CO2 Abatement Policies: What Does It Cost? **AU** Bovenberg, A. Lans; Goulder, Lawrence H.

Gowrisankaran, Gautam

PD September 1999. **TI** Network Externalities and Technology Adoption: Lessons from Electronic Payments. **AU** Gowrisankaran, Gautam; Stavins, Joanna. **AA** Gowrisankaran: University of Minnesota and Federal Reserve Bank of Minneapolis. Stavins: Federal Reserve Bank of Boston. **SR** Federal Reserve Bank of Boston Working Paper: 99/05; Research Library, Federal Reserve Bank of Boston, P.O. Box 2076, Boston, MA 02106-2076. Website: www.bos.frb.org/economic/wpchrono.htm. **PG** 40. **PR** no charge. **JE** G21, O31, O32. **KW** Electronic Payment. ACH. Technology Adoption. Network Externalities.

AB We seek to determine the presence and causes of network externalities for the automated clearinghouse (ACH) electronic payments system, using a monthly panel data set on individual bank adoption of ACH. We construct a model of ACH usage that shows how to separately identify network externalities from technological advancement and peer- group effects. We find significant evidence of network effects and find evidence that these network effects are not internalized. Moreover, a large part of these network effects is due to informational problems. Sunk costs of adoption appear to be low.

Grogan, Louise

TI The Duration of Unemployment in Russia. **AU** van den Berg, Gerard J.; Grogan, Louise.

Grose, Simone

PD February 2000. **TI** Estimating Demand With Varied Levels of Aggregation. **AU** Grose, Simone; McLaren, Keith. **AA** Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Paper: 00/01; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/. **PG** 29. **PR** no charge. **JE** C32, C51, D12, E21. **KW** Singular Demand Systems. Linear Expenditure System. Almost Ideal Demand. Missing Data.

AB The response of consumer demand to prices, income, and other characteristics is important for a range of policy issues. Naturally, the level of detail for which consumer behavior can be estimated depends on the level of disaggregation of the available data. This paper develops a specification/estimation technique that exploits the entire information content of a variably-aggregated data set. The technique is based on the observation that the more highly aggregated data does in fact contain information on the finer subcategories: viz, the sum of certain subcategory expenditures is observed. It is thus possible, under certain simplifying assumptions, to write down, and maximize, the likelihood of the observed data as a function of the parameters of the chosen model written for the finest

available level of disaggregation. The technique is applied to an ABS dataset containing historical information relating to private final consumption expenditures on up to 18 commodities, and found to be feasible for both the LES and AIDS.

PD March 2000. **TI** An EM Algorithm for Modelling Variably-Aggregated Demand. **AU** Grose, Simone; McLaren, Keith. **AA** Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Paper: 00/02; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/. **PG** 26. **PR** no charge. **JE** C32, C51, D12, E21. **KW** EM Algorithm. Singular Demand Systems. Linear Expenditure System. Missing Data.

AB This paper develops an EM algorithm for the estimation of a consumer demand system involving variably aggregated data. The methodology is based on the observation that more highly aggregated data does in fact contain information on the finer subcategories. It is therefore possible, under certain simplifying assumptions, to derive the distribution of the unobserved fine-level expenditures conditional on the observed but more highly aggregated data. The expectation of the log-likelihood is then taken with respect to this conditional distribution. Under the assumption of multivariate normality both these steps can be performed analytically, resulting in an EM criterion that can be maximized iteratively at comparatively little cost. The technique is applied to an ABS dataset containing historical information relating to private final consumption expenditures on up to 18 commodities.

TI A State Space Framework for Automatic Forecasting Using Exponential Smoothing Methods. **AU** Hyndman, Rob J.; Koehler, Anne B.; Snyder, Ralph D.; Grose, Simone.

Grossman, Gene M.

PD September 1999. **TI** Imperfect Labour Contracts and International Trade. **AA** Princeton University. **SR** Centre for Economic Policy Research Discussion Paper: 2240; CEPR, 90- 98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 48. **PR** 5 pounds, \$8 or 8 euros. **JE** D51, F11. **KW** Labor Contracts. Diversity. Team Production. Comparative Advantage. Income Distribution.

AB In an economy with imperfect labor contracts, differences in the distribution of human capital are an independent source of comparative advantage. This paper studies a world economy with two sectors, one in which output is produced by teams and another in which individuals can work alone. When workers' abilities are private information and workers cannot verify the value of output or the level of a firm's profits, feasible labor contracts fail to generate efficient matching of workers within teams. The mismatch of talent on teams is more severe in the country with the more heterogeneous labor force, which generates a comparative disadvantage for this country in team production. Trade exacerbates the "polarization" of the more diverse society. National income could be raised, and the distribution of income improved, by a marginal expansion in the size of the team sector.

PD November 1999. **TI** Incomplete Contracts and Industrial Organization. **AU** Grossman, Gene M.; Helpman, Elhanan. **AA** Grossman: Princeton University. Helpman: Tel Aviv University. **SR** Centre for Economic Policy Research

Discussion Paper: 2280; CEPR, 90- 98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 52. PR 5 pounds, \$8 or 8 euros. JE D23, D43, D51. KW Vertical Integration. Hold-Up Problem. Input Specificity. AB This paper develops an equilibrium model of industrial structure in which the organization of firms is endogenous. Differentiated consumer products can be produced either by vertically integrated firms or by pairs of specialized companies. Production of each variety of consumer good requires a unique, specialized component. Vertically integrated firms can manufacture the components they need in the quantity and type that maximizes profits, but they face a relatively high cost of governance. Specialized firms can produce at lower cost, but input suppliers face a potential hold-up problem. The research studies the equilibrium mode of organization when inputs are fully or partially specialized and considers how the degree of competition in the market and other parameters affect the equilibrium choices, and how the equilibrium compares with the efficient allocation.

Grubb, Michael

PD April 2000. TI The Kyoto Protocol: An Economic Appraisal. AA Imperial College and Royal Institute of International Affairs. SR Fondazione Eni Enrico Mattei Note di Lavoro: 00/30; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 40. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE Q21, Q28. KW Kyoto Protocol. Climate Change.

AB This paper examines the overall economics of the Kyoto Protocol on climate change, in three parts. The first part explores the structure of the Protocol and how this matches against classical economic criteria of an "optimal" climate change agreement. The flexibility in the Kyoto Protocol makes it far more economically efficient in its structure than any previous global environmental agreement. The second part of the paper explores the economics of the commitments themselves and how they combine with the various flexibilities. Finally, the paper considers the issues of developing country involvement in the Kyoto Protocol, and the Protocol's longer-term impact and evolution, including its impact on technological evolution and dissemination and the evolution of future commitments.

Gruber, Jonathan

PD February 2000. TI Tax Subsidies for Health Insurance: Evaluating the Costs and Benefits. AA Massachusetts Institute of Technology and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 7553; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. PG 63. PR \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). JE H23, I18. KW Health Insurance. Tax Subsidy. United States.

AB The continued rise in the number of non-elderly Americans without health insurance has led to considerable interest in tax-based policies to raise the level of insurance coverage. This paper describes a detailed microsimulation model that has been developed to evaluate such tax-based policies, and its findings for the impact of policies on government costs and insurance coverage. Findings are that while tax subsidies could significantly increase insurance

coverage, even very generous tax policies could not cover more than a sizeable minority of the uninsured population. But there are several design features which can clearly make tax policy more effective: using tax credits rather than deductions; making credits refundable; and addressing the timing mismatch between when insurance purchases are made and tax refunds are received. The paper also documents a clear tradeoff between the scope of tax subsidies and their efficiency.

TI Does Public Insurance Improve the Efficiency of Medical Care? Medicaid Expansions and Child Hospitalizations. AU Dafny, Leemore; Gruber, Jonathan.

TI Delays in Claiming Social Security Benefits. AU Coile, Courtney; Diamond, Peter; Gruber, Jonathan; Jousten, Alain.

Guichard, Stephanie

PD December 2000. TI The Wage Curve: The Lessons of an Estimation over a Panel of Countries. AU Guichard, Stephanie; Laffargue, Jean-Pierre. AA Guichard: CEPII. Laffargue: CEPREMAP (Centre d'Etudes Prospectives d'Economie Mathematique Appliquees a la Planification). SR CEPII Working Paper: 2000/21; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. PG 21. PR no charge. JE C33, J30. KW International Comparison. Labor Market. Wage Flexibility. Generalized Method of Moments.

AB This paper gives a systematic comparison of private wage behavior in industrialized countries. A wage curve with nominal rigidities is estimated on a panel of 16 countries according to a specific method based on GMM (generalized method of moments) and factor analysis. First, we show that the employment rate is a better indicator of labor market tensions than the unemployment rate. Second, the main difference across countries is the reaction of the wage rate to changes in productivity and in the employment rate. Third, we find evidence of some nominal rigidity in wage behavior and of a positive but small effect of the wedge.

TI Marmotte: A Multinational Model. AU Cadiou, Loic; Dees, Stephane; Guichard, Stephanie; Kadareja, Arjan; Laffargue, Jean-Pierre; Rzepkowski, Bronka.

Guillaumont, Patrick

TI Ethnicity, Communication and Growth. AU Arcand, Jean-Louis; Guillaumont, Patrick; Guillaumont Jeanneney, Sylviane.

TI Ethnicity, Communication and Growth. AU Arcand, Jean-Louis; Guillaumont, Patrick; Guillaumont Jeanneney, Sylviane.

Gunderson, Alan

PD October 1998. TI Signalling by Jump Bidding in Private Value Auctions. AU Gunderson, Alan; Wang, Ruqu. AA Gunderson: Industry Canada. Wang: Queen's University. SR Queen's Institute for Economic Research Discussion Paper: 975; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html.

PG 21. PR Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. JE C72, D44.

KW Auction. Jump Bidding.

AB This paper examines how a bidder can benefit from jump bidding by using the jump bid as a signal of a high valuation which causes other bidders to drop out of the auction earlier than they would otherwise. The information contained in a jump bid must be sufficient to induce a discrete change in the bidding behavior of the other bidders. In an auction for a single item, a jump bid signals both the identity and the high valuation of a bidder. The existence of beneficial jump bid equilibrium requires a gap in the distribution of the jump bidder and her identity must be concealed. Concealing the identity of the bidders permits the jump bidder to signal more information through the jump bid and thus she can benefit more from it. In an auction for multiple items, the jump bid signals a high valuation by the jump bidder.

Gunning, Jan Willem

PD 1999. **TI** Revisiting Forever Gained: Income Dynamics in the Resettlement Areas of Zimbabwe, 1983-1997. **AU** Gunning, Jan Willem; Hoddinott, John; Kinsey, Bill; Owens, Trudy. **AA** Gunning: Free University. Hoddinott: IFPRI, Washington DC. Kinsey: University of Zimbabwe. Owens: CSAE University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/1999/14; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csaee.ox.ac.uk/. **PG** 24. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** O41, O47. **KW** Growth. Poverty. Income Dynamics. Zimbabwe.

AB This paper examines income dynamics for a panel of households resettled on former white-owned farms in the aftermath of Zimbabwe's independence. There are four core findings: (i) there has been an impressive accumulation of assets by these households; (ii) while this accumulation has played a role in increases in crop income, increases in returns to these assets have been especially important in generating the dramatic increase in crop incomes observed in these households; (iii) differences in initial conditions across these households, such as previous farming experience, have few persistent effects; and (iv) growth in incomes has been shared across all households, with the largest percentage increases in predicted incomes recorded by households that had the lowest predicted incomes at the beginning of the survey.

TI The IMF's Role in Structural Adjustment. **AU** Collier, Paul; Gunning, Jan Willem.

TI Inventories and Risk in African Manufacturing. **AU** Fafchamps, Marcel; Gunning, Jan Willem; Oostendorp, Remco.

Gustman, Alan L.

PD March 2000. **TI** Retirement Outcomes in the Health and Retirement Study. **AU** Gustman, Alan L.; Steinmeier, Thomas L. **AA** Gustman: Dartmouth College and National Bureau of Economic Research. Steinmeier: Texas Tech University. **SR** National Bureau of Economic Research Working Paper: 7588; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 21. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** H55, J14, J26. **KW** Social Security. Retirement. Dependent Variable Studies. **AB** This study examines retirement outcomes in the first four waves of the Health and Retirement Study (HRS). Measured

retirement is seen to differ with the definition of retirement used and among various groups analyzed. Moreover, these differences vary with the wave of the survey as respondents age. Retirement is comprised of a complex set of flows among states representing full time work, partial retirement and complete retirement. Comparing retirement flows for men between the HRS and the 1969-1979 Retirement History Study (RHS), the large spike in the population leaving full time work at age 65 observed in the RHS is reduced to half its original size in the HRS, while the share leaving full time work at age 62 has almost doubled over time. The results presented here should help researchers to improve their understanding of the structure of the dependent variable in retirement studies.

PD March 2000. **TI** How Effective is Redistribution Under the Social Security Benefit Formula? **AU** Gustman, Alan L.; Steinmeier, Thomas L. **AA** Gustman: Dartmouth College and National Bureau of Economic Research. Steinmeier: Texas Tech University. **SR** National Bureau of Economic Research Working Paper: 7597; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 33. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** D31, H55, J14, J26. **KW** Social Security. Income Redistribution. Retirement.

AB This paper uses earnings histories obtained from the Social Security Administration and linked to the survey responses for participants in the Health and Retirement Study to investigate redistribution under the current social security benefit formula. When individuals are arrayed by indexed lifetime earnings, benefits are significantly redistributed from those with high lifetime earnings to those with low lifetime earnings. However, much of this apparent redistribution is from men to women, and when examined at the level of the family, from primary to secondary earners. When families are arrayed according to the total lifetime earnings, and spouse and survivor benefits are taken into account, the extent of redistribution from families with high lifetime earnings to families with low lifetime earnings is roughly halved. When families are arrayed by their earnings potential, i.e., earnings during years when both spouses are engaged in substantial work, there is very little redistribution from families with high to low earnings capacity. Accordingly, at least for families on the verge of retirement day, introducing a system that ignored issues of redistribution would have no major effect on the distribution of social security benefits net of taxes among families with different earnings capacities.

PD September 1999. **TI** What People Don't Know About Their Pensions and Social Security: An Analysis Using Linked Data from the Health and Retirement Study. **AU** Gustman, Alan L.; Steinmeier, Thomas L. **AA** Gustman: Dartmouth College and NBER. Steinmeier: Texas Tech University. **SR** National Bureau of Economic Research Working Paper: 7368; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 42. **PR** \$5.00. **JE** D31, H55, J14, J26, J32. **KW** Pension Plans. Social Security. Retirement. Income Distribution. Nonwage Benefits.

AB Pension plan descriptions from respondents to the 1992 Health and Retirement Study are compared with descriptions obtained from their employers. Earnings histories reported by respondents are compared with earnings histories from the Social Security Administration. The probability of linking employer pension data, which is two thirds for current jobs, and

of obtaining permission to link an earnings history, which is over 70 percent, are not well explained by respondent characteristics. Half of respondents with linked pension data correctly identify plan type, and fewer than half identify, within one year, dates of eligibility for early and normal retirement benefits. Benefit reduction rates are essentially not reported. Respondents do better in reporting pension values, but the unexplained variation is still considerable. In contrast, respondent reported values together with other observables, account for 80 percent of the variation in pension values and 75 percent of the variation in covered earnings measured from linked records. Thus prospects are good for imputing plan values, but not for imputing the location or size of early retirement incentives. Our findings raise questions about how well respondents understand complex pension and Social Security rules.

Ha-Duong, Minh

PD December 1999. **TI** Recursive Intergenerational Utility in Global Climate Risk Modeling. **AU** Ha-Duong, Minh; Treich, Nicholas. **AA** Ha-Duong: CIRED-CNRS, France. Treich: CIRANO, Quebec and LEERNA-INRA, France. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 99/92; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. **Website:** www.feem.it. **PG** 26. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D81, D91, H43, Q21. **KW** Recursive Utility. Risk. Discounting. Sustainability. Climate.

AB This paper distinguishes relative risk aversion and resistance to intertemporal substitution in climate risk modeling. Stochastic recursive preferences are introduced in a stylized numeric climate- economy model using preliminary IPCC 1998 scenarios. It shows that higher risk aversion increases the optimal carbon tax. Higher resistance to intertemporal substitution alone has the same effect as increasing the discount rate, provided that the risk is not too large. We discuss implications of these findings for the debate upon discounting and sustainability under uncertainty.

Haaland, Jan I.

TI A U-Shaped Europe? A Simulation Study of Industrial Location. **AU** Forslid, Rikard; Haaland, Jan I.; Knarvik, Karen-Helene Midelfart

Hahn, Robert W.

PD March 1999. **TI** What Has Kyoto Wrought? The Real Architecture of International Tradable Permit Markets. **AU** Hahn, Robert W.; Stavins, Robert N. **AA** Hahn: AEL-Brookings Joint Center for Regulatory Studies and Harvard University. Stavins: Harvard University and Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/30; 1616 P Street, NW, Washington, DC 20036. **Website:** www.rff.org. **PG** 23. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** F42, Q25, Q28. **KW** Climate Change. Tradable Permits. International Policy. Air Pollution. Greenhouse Gases.

AB This paper investigates a central issue in the climate change debate associated with the Kyoto Protocol: the likely performance of international greenhouse gas trading mechanisms. Virtually all design studies and many projections of the costs of meeting the Kyoto targets have assumed that an international trading program can be established that minimizes

the costs of meeting overall goals. This conclusion rests on several simplifying assumptions. In this paper, the authors focus on one important issue that has received little, if any, attention: the interaction between an international trading regime and a heterogeneous set of domestic greenhouse policy instruments. This is an important issue because the Protocol explicitly provides for domestic sovereignty regarding instrument choice, and because it is unlikely that most countries will choose tradable permits as their primary domestic vehicle.

Haimanko, Ori

TI Unilateral Deviations with Perfect Information. **AU** Dubey, Pradeep; Haimanko, Ori.

Hall, Brian J.

PD February 2000. **TI** Optimal Exercise Prices for Executive Stock Options. **AU** Hall, Brian J.; Murphy, Kevin J. **AA** Hall: Harvard Business School and National Bureau of Economic Research. Murphy: University of Southern California. **SR** National Bureau of Economic Research Working Paper: 7548; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. **Website:** www.nber.org. **PG** 11. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside US). **JE** G00, G33, J00, J33. **KW** Stock Options. Incentives. Exercise Prices.

AB Although exercise prices for executive stock options can be set either below or above the grant-date market price, in practice virtually all options are granted at the money. We offer an economic rationale for this apparent puzzle, by showing that pay-to-performance incentives for risk-averse, undiversified executives are typically maximized by setting exercise prices at (or near) the grant-date market price. We provide an operationally useful alternative to Black Scholes (1973) for the purpose of both valuing executive stock options and measuring the incentives created by options. Our framework has implications not only for exercise-price policies, but also for indexed options, option repricings, exchanges of cash for stock-based compensation, and the design of bonus plans.

PD March 2000. **TI** The Taxation of Executive Compensation. **AU** Hall, Brian J.; Liebman, Jeffrey B. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7596; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. **Website:** www.nber.org. **PG** 28. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** G35, H20, J33. **KW** Executive Compensation. Stock Options. Tax Policy.

AB Over the past 20 years, there has been a dramatic increase in the share of executive compensation paid through stock options. This paper examines the extent to which tax policy has influenced the composition of executive compensation, discussing the implications of rising stock-based pay for tax policy. Empirical analysis leads to three conclusions. First, there is little evidence that tax changes have played a major role in the dramatic explosion in executive stock option pay since 1980. More convincingly, the dramatic explosion in stock options involves changes in corporate governance and the market for corporate control. Second, there is evidence that the million dollar rule (which limited the corporate deductibility of non-performance-related executive compensation to \$1 million) led firms to adjust the composition of their pay away from salary and toward "performance related

pay," although estimates suggest that substitution was minor. Third, examining whether there is evidence for significant shifting of the timing of option exercises in response to changes in tax rates shows that no such shifting occurred in either of the two tax reforms of the 1980s.

Hall, Bronwyn H.

TI Heart of Darkness: Modeling Public-Private Funding Interactions Inside the R&D Black Box. **AU** David, Paul A.; Hall, Bronwyn H.

TI Is Public R&D a Complement or Substitute for Private R&D? A Review of the Econometric Evidence. **AU** David, Paul A.; Hall, Bronwyn H.; Toole, Andrew A.

Haller, Severine

TI The Convergence of Automobile Prices in the European Union: An Empirical Analysis for the Period 1993-1999. **AU** Gaulier, Guillaume; Haller, Severine.

Harrington, Winston

PD January 1999. **TI** On the Accuracy of Regulatory Cost Estimates. **AU** Harrington, Winston; Morgenstern, Richard D.; Nelson, Peter. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/18; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 44. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D82, J28, K23, L51, Q28. **KW** Environmental Costs. Costing Accuracy. Innovation. Regulation. Occupational Safety.

AB This study compares ex ante estimates of the direct costs of individual regulations to ex post assessments of the same regulations. A review of more than two dozen environmental and occupational safety regulations indicates that ex ante estimates of total (direct) costs have tended to exceed actuals. The authors find this to be true of 12 of the 25 rules in their data set, while for only 6 were the ex ante estimates too low. The overestimation of total costs is often due to errors in the quantity of emission reductions achieved by the rule which, in turn, suggests that the rule's benefits may also be overestimated. The quantity errors are driven by both baseline and compliance issues. At least for EPA and OSHA rules, overestimation of per-unit abatement costs occurs about as often as underestimation. In contrast, for those rules that use economic incentives, per-unit costs are consistently overestimated.

PD February 1999. **TI** Coase and Car Repair: Who Should Be Responsible for Emissions of Vehicles in Use? **AU** Harrington, Winston; McConnell, Virginia D. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/22; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 41. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** Q25, Q28, R48. **KW** Mobile Sources. Vehicle Emissions. Coase. Liability. Air Pollution.

AB This paper examines the current assignment of liability for in-use vehicle emissions and suggests some alternative policies that may reduce the cost and increase the effectiveness. The authors first discuss the cost, performance and incentives under current Inspection and Maintenance (I/M) programs, using the recently implemented Arizona "Enhanced I/M" program as an example. These programs were designed to identify and repair vehicles with malfunctioning emission control systems. Since their inception, however, I/M programs

have been plagued by transaction costs that have drastically raised the cost of I/M as well as limited its effectiveness. These transaction costs fall into three categories: emission monitoring, repair avoidance, and non-transferability of emission reductions. The authors argue that most of these transaction costs can be attributed to the current assignment of liability for I/M to motorists, and they examine the potential for other liability assignments to reduce transaction costs and improve program efficiency. Among the alternative institutional arrangements discussed are greater imposition of liability on manufacturers, emission repair subsidies, repair liability auctions, and vehicle leasing.

TI The Use of Economic Incentives in Developing Countries: Lessons from International Experience with Industrial Air Pollution. **AU** Blackman, Allen; Harrington, Winston.

PD June 1999. **TI** The Enhanced I/M Program in Arizona: Costs, Effectiveness, and a Comparison with Pre-Regulatory Estimates. **AU** Harrington, Winston; McConnell, Virginia D.; Ando, Amy. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/37; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 23. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** Q25, Q28, R48. **KW** Cost-Effectiveness. Vehicle Emissions. Mobile Sources. Air Pollution. Environmental Regulation.

AB Using data from 1995 and 1996, the authors of this paper estimate the cost of the Arizona Enhanced I/M Program and the emission reductions achieved. They begin by enumerating briefly the components of I/M costs and discuss their size and incidence. Then they describe the empirical information from Arizona and how they use it to construct cost estimates for both vehicle inspection and repair of failing vehicles. Inspection costs include the costs of operating the test stations and the costs motorists incur in time and money to get to the station and go through the testing process. The authors find that the inspection costs account for over two-thirds of the full costs of I/M, while costs associated with actual vehicle repair account for only one third. They conclude by comparing the empirical estimates of costs and program effectiveness in the Arizona program with the ex ante estimated Enhanced I/M program costs made by the EPA in the 1992 Regulatory Impact Analysis (RIA). The ex ante EPA analysis appears to have underestimated the costs of achieving the ambitious reductions in emissions hoped for under I/M.

TI Costs, Emissions Reductions, and Vehicle Repair: Evidence from Arizona. **AU** Ando, Amy; McConnell, Virginia D.; Harrington, Winston.

Hart, Oliver

PD October 1999. **TI** On the Design of Hierarchies: Coordination Versus Specialization. **AU** Hart, Oliver; Moore, John. **AA** Hart: Harvard University and NBER. Moore: London School of Economics. **SR** National Bureau of Economic Research Working Paper: 7388; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 43. **PR** \$5.00. **JE** D20, G30, L23, M11, M12. **KW** Hierarchies. Delegation. Corporate Governance. Management. Firm Organization.

AB We develop a model of hierarchies based on the allocation of authority. A firm's owners have ultimate authority

over a firm's decisions, but they have limited time or capacity to exercise this authority. Hence owners must delegate authority to subordinates. However, these subordinates also have limited time or capacity and so further delegation must occur. We analyze the optimal chain of command given that different agents have different tasks: some agents are engaged in coordination and others in specialization. Our theory throws light on the nature of hierarchy, the optimal degree of decentralization, and the boundaries of the firm.

Hartwick, John M.

PD January 1999. **TI** Loan-Monitoring and Deposit-Servicing by Commercial Banks in a Stationary Environment. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 979; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html.

PG 19. **PR** Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. **JE** G21, P12. **KW** Loan-Monitoring. Deposit-Servicing. Commercial Banks. Stationary Environment.

AB We take up the hypothesis that risk premiums on equities are embodying the costs incurred by equity holders in monitoring the firms which they have invested in. This idea is a key ingredient in our construction of a two sector neoclassical model with widget producing firms and commercial banks. So-called user costs or interest rate spreads are key prices of commercial bank services in the model. Commercial banks produce deposit services (check-writing services or transactions services) and lending services to widget producers.

Haskel, Jonathan E.

PD February 2000. **TI** Have Falling Tariffs and Transportation Costs Raised U.S. Wage Inequality? **AU** Haskel, Jonathan E.; Slaughter, Matthew J. **AA** Haskel: University of London and Centre for Economic Policy Research. Slaughter: Dartmouth College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7539; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 17. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** F13, F17, J31. **KW** Trade Barriers. Skill Premium. United States.

AB A number of studies have tried to gauge the effect of international trade on the rising U. S. skill premium by examining whether product prices in unskill-intensive sectors have fallen relative to prices in skill-intensive sectors. However, these studies do not estimate what share of domestic product-price changes is due to trade barriers. This paper attempts to address the issue by analyzing not the sector bias of price changes but rather price changes induced by changes in U. S. tariffs and transportation costs. We find that in both the 1970s and 1980s, level cuts in tariffs and transportation costs were concentrated in the unskill-intensive sectors. If pass-through of trade barriers to product prices is uniform across all sectors, then this suggests falls in tariffs and transportation costs were mandating a rise in the U. S. skill premium. But despite this suggestive evidence, we estimate that the price changes induced by tariffs or transportation costs mandated a rise in the skill premium that was statistically insignificant. Thus, there is no strong evidence that falling tariffs and transport costs,

working through price changes, mandated rises in inequality.

Haughwout, Andrew

PD March 2000. **TI** Local Revenue Hills: A General Equilibrium Specification with Evidence from Four U.S. Cities. **AU** Haughwout, Andrew; Inman, Robert; Craig, Steven; Luce, Thomas. **AA** Haughwout: Federal Reserve Bank of New York. Inman: University of Pennsylvania and National Bureau of Economic Research. Craig: University of Houston. Luce: University of Minnesota. **SR** National Bureau of Economic Research Working Paper: 7603; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 43. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** H20, H71, R51. **KW** Taxation, Local.

AB This paper provides estimates of the impact and long-run elasticities of tax base with respect to tax rates for four large U.S. cities: Houston (property taxation), Minneapolis (property taxation), New York City (property, general sales, and income taxation), and Philadelphia (property, gross receipts, and wage taxation). Results suggest that all four of our cities are near the peaks of their longer-run revenue hills. Equilibrium effects are observed within three to four fiscal years after the initial increase in local tax rates. A significant negative impact (current period) effect of balanced budget increase in city property tax rates on city property base is interpreted as a capitalization effect and suggests that marginal increases in city spending do not provide positive net benefits to property owners. Estimates of the effects of taxes on city employment levels for New York City and Philadelphia -- the two cities for which employment series are available -- show the local income and wage tax rates have significant negative effects on city employment levels.

Haynes, Stephen E.

TI Antidumping Investigations and the Pass-Through of Exchange Rates and Antidumping Duties. **AU** Blonigen, Bruce A.; Haynes, Stephen E.

Hayri, Aydin

PD October 1999. **TI** Does More Intense Competition Lead to Higher Growth? **AU** Hayri, Aydin; Dutz, Mark. **AA** Hayri: University of Warwick. Dutz: World Bank and EBRD (European Bank for Reconstruction and Development). **SR** Centre for Economic Policy Research Discussion Paper: 2249; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** F43, L16, O47. **KW** Growth. Competition. Extreme Bounds Analysis. Antitrust.

AB The relationship between the overall intensity of competition in an economy and its long-run growth is an open question in economics. Theoretically, there is no clear-cut answer. However, there exists empirical evidence that in some sectors more competition leads to more innovation and accelerates productivity growth. To complement these findings and capture economy-wide effects, cross-country study was conducted. Examining the impact of intensity of domestic competition beyond trade liberalization on growth indicate that the effectiveness of antitrust and competition policy enforcement is positively associated with long-run growth.

Head, Allen

PD July 2000. **TI** A Fundamental Theory of Exchange

Rates and Direct Currency Trades. **AU** Head, Allen; Shi, Shouyong. **AA** Head: Queen's University. Shi: Indiana University and Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 993; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html. **PG** 47. **PR** Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. **JE** C78, F31. **KW** Exchange Rates. Search. Money. Currency Trade.

AB In this paper we construct a two-country search monetary model to determine the nominal exchange rate between two fiat monies. Our model imposes natural restrictions on agents' opportunities for arbitrage. These restrictions bind when the gross growth rates of the two currency stocks exceed the discount factor. In this case the nominal exchange rate is determinate and depends on economic fundamentals of the two countries' economies, including the stocks and growth rates of the two monies. The model generates essential, direct currency-for-currency exchanges, which imply a nominal exchange rate that is different from the relative price between the two currencies in the goods markets. Unless the stocks of the two monies remain constant, there are persistent violations of the law of one price and purchasing power parity in equilibrium despite the fact that prices are perfectly flexible and all goods are tradable between countries. Nominal and real exchange rates can move together in the steady state in response to money growth shocks.

Head, Keith

PD September 2001. **TI** Effet frontiere, integration economique et "Forteresse Europe" (Border Effect, Economic Integration and Fortress Europe). **AU** Head, Keith; Mayer, Thierry. **AA** Head: University of British Columbia. Mayer: Universite Paris I Pantheon Sorbonne. **SR** CEPPII Working Paper: 2001/06; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 34. **PR** no charge. **JE** F12, F15. **KW** Border Effects. European Union. Gravity.

AB The achievement of the European integration with the implementation of the Single Act raised important fears in non-members countries. The main concern was that the withdrawal of the remaining trade barriers in Europe would prevent the non-European exporters to benefit from a broader access to this enlarged market. This paper analyzes these concerns over the building of a "Fortress Europe" using the methodology of the border effects initiated by John McCallum in 1995, for the years 1976-1995 and for 100 industries. At the beginning of the eighties for the US, and during the whole decade for Japan, the study concludes that producers from these countries had more difficulties in exporting to the European market. The border effect differs according to the industry.

Hege, Ulrich

TI The Financing of Innovation: Learning and Stopping. **AU** Bergemann, Dirk; Hege, Ulrich.

Helpman, Elhanan

TI Incomplete Contracts and Industrial Organization. **AU** Grossman, Gene M.; Helpman, Elhanan.

Henderson, J. Vernon

TI Costs of Air Quality Regulation. **AU** Becker, Randy A.; Henderson, J. Vernon.

Herings, Jean-Jacques

PD March 2000. **TI** Equilibrium and Arbitrage in Incomplete Asset Markets with Fixed Prices. **AU** Herings, Jean-Jacques; Polemarchakis, Heracles M. **AA** Herings: University of Maastricht. Polemarchakis: CORE. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/26; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 30. **PR** \$100 per year. **JE** D45, D52, D60, G11, G12. **KW** Incomplete Asset Markets. Fix-Price Equilibrium. Arbitrage. Asset Pricing. Portfolio Choice.

AB At arbitrary prices of commodities and assets, fix-price equilibria exist under weak assumptions: endowments need not satisfy an interiority condition, utility functions need only satisfy very weak monotonicity requirements, and the asset return matrix allows for redundant assets. Prices of assets may permit arbitrage. At equilibrium, though restricted through endogenously determined trading constraints, arbitrage possibilities may persist; in an example, an individual holds an arbitrage portfolio.

Hoddinott, John

TI The Impact of Agricultural Extension on Farm Production in Resettlement Areas of Zimbabwe. **AU** Owens, Trudy; Hoddinott, John; Kinsey, Bill.

TI Revisiting Forever Gained: Income Dynamics in the Resettlement Areas of Zimbabwe, 1983-1997. **AU** Gunning, Jan Willem; Hoddinott, John; Kinsey, Bill; Owens, Trudy.

Hoeffler, Anke

TI Greed and Grievance in Civil War. **AU** Collier, Paul; Hoeffler, Anke.

Hoglund, Lena

TI Output-Eased Refunding of Emission Payments: Theory, Distribution of Costs, and International Experience. **AU** Sterner, Thomas; Hoglund, Lena.

Hong, Harrison

PD October 1999. **TI** Differences of Opinion, Rational Arbitrage and Market Crashes. **AU** Hong, Harrison; Stein, Jeremy C. **AA** Hong: Stanford University. Stein: Harvard Business School, MIT and NBER. **SR** National Bureau of Economic Research Working Paper: 7376; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** D82, G12, G14. **KW** Stock Markets. Private Information. Negative Skewness. Asset Pricing. Market Crashes.

AB We develop a theory of stock-market crashes based on differences of opinion among investors. Because of short-sales constraints, bearish investors do not initially participate in the market and their information is not revealed in prices. However, if other, previously-bullish investors have a change of heart and bail out of the market, the originally-more-bearish group may become the marginal "support buyers", and hence

more will be learned about their signals. Thus accumulated hidden information tends to come out during market declines. The model helps explain a variety of stylized facts, including: 1) large movements in prices unaccompanied by significant news about fundamentals; 2) negative skewness in the distribution of market returns; and 3) increased correlation among stocks in a falling market. In addition, the model makes a distinctive out-of-sample prediction: that negative skewness will be most pronounced conditional on high trading volume.

Honkapohja, Seppo

PD September 1999. **TI** Complementarity, Growth and Trade. **AU** Honkapohja, Seppo; Turunen-Red, Arja **AA** Honkapohja: Academy of Finland and University of Helsinki. Turunen-Red: University of New Orleans. **SR** Centre for Economic Policy Research Discussion Paper: 2234; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** F12, F15, O41. **KW** Innovation. International Trade. Technology Policy. Multiple Equilibria.

AB This paper considers an endogenous growth model that includes international trade in capital goods. The model yields several distinct balanced growth solutions that can be classified using stability under adaptive learning. Some of the equilibria can involve growth rates much higher (or lower) than others. The impact of international trade on the equilibria include local (differential) effects and global bifurcation (global) changes. If a favorable bifurcation occurs, equilibria associated with low growth disappear. This phenomenon suggests a possible explanation for observations in which active international trade by some countries seems to have been associated with periods of exceptionally high growth. Equivalent bifurcation effects can be induced in autarky using domestic industry subsidies. However, such subsidization can be very costly.

Horstmann, Ignatius J.

PD October 1999. **TI** The New Federalism: Distributional Conflict, Voluntarism and Segregation. **AU** Horstmann, Ignatius J.; Scharf, Kimberley Ann. **AA** Horstmann: University of Western Ontario. Scharf: University of Warwick. **SR** Centre for Economic Policy Research Discussion Paper: 2273; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 36. **PR** 5 pounds, \$8 or 8 euros. **JE** H20, H70. **KW** Fiscal Federalism. Private Provision of Public Goods. Jurisdiction Formation.

AB This paper examines a model of jurisdiction formation where individuals differ in both income and preferences, and where public provision choices within jurisdictions are the outcome of a political process, but can be supplemented by private contributions. Locational equilibria in this model can feature inefficient segregation along income lines, which is more likely to occur the larger is income heterogeneity. Furthermore, the model predicts that an increase in income heterogeneity can be accompanied by an increase in private provision. This prediction squares with the observed correlation in the U.S. between rising income inequality on the one hand, and recent trends towards fiscal devolution and privatization on the other.

Hosken, Daniel

PD January 2000. **TI** How do Retailers Adjust Prices: Evidence From Store-Level Data. **AU** Hosken, Daniel;

Matsa, David; Reiffen, David. **AA** Hosken and Reiffen: Federal Trade Commission. Matsa: MIT. **SR** Federal Trade Commission Bureau of Economics Working Paper: 230; 600 Pennsylvania Avenue, NW, Washington, DC 20580. Website: bperson@ftc.gov. **PG** 47. **PR** no charge. **JE** D21, L11, L21, L40, L81. **KW** Retail. Pricing Dynamics. Sales.

AB Recent theoretical work on retail pricing dynamics suggests that retailers periodically hold sales -- temporary price reductions -- even when their costs are unchanged. This paper extends existing theory to predict which items will go on sale, and uses a new BLS data set to document the frequency of sales across a wide range of goods and geographic areas. We find a number of pricing regularities for the 20 categories of goods examined. First, retailers seem to have a "regular" price, and most deviations from that price are downward. Second, there is considerable heterogeneity in sale behavior across goods within categories; the same items are regularly put on sale, while others are rarely on sale. Third, items are more likely to go on sale when demand is highest. Fourth, for a limited number of items for which we know market shares, products with larger market shares go on sale more often.

Hotz, V. Joseph

PD October 1999. **TI** Teenage Childbearing and Its Life Cycle Consequences: Exploiting a Natural Experiment. **AU** Hotz, V. Joseph; Williams McElroy, Susan; Sanders, Seth G. **AA** Hotz: UCLA and NBER. Sanders: University of Maryland. Williams McElroy: Carnegie Mellon University. **SR** National Bureau of Economic Research Working Paper: 7397; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 36. **PR** \$5.00. **JE** J31, J13, J23, J24, J31. **KW** Teenage Childbearing. Human Capital. Employment. Children. Natural Experiments.

AB This paper exploits a "natural experiment" associated with human reproduction to identify the effect of teen childbearing on subsequent educational attainment, family structure, labor market outcomes, and financial self-sufficiency. In particular, the authors exploit the fact that a substantial fraction of women who become pregnant experience a miscarriage (spontaneous abortion) and thus do not have a birth. Exploiting this natural experiment, the authors devise an Instrumental Variables (IV) estimator for the consequences of teen mothers not delaying their childbearing, using data from the National Longitudinal Survey of Youth, 1979 (NLSY79). The major finding is that many of the negative consequences of not delaying childbearing until adulthood are much smaller than has been estimated in previous studies. While the authors do find adverse consequences of teenage childbearing immediately following a teen mother's first birth, these negative consequences appear short-lived. In fact, by their late twenties teen mothers appear to be better off in some aspects of their lives. These estimated effects imply that the cost of teenage childbearing to U.S. taxpayers is negligible.

Howitt, Peter

TI General Purpose Technology and Within-Group Wage Inequality. **AU** Aghion, Philippe; Howitt, Peter; Violante, Giovanni L.

Hunter, John

TI Identifying Long-Run Behavior with Non-Stationary Data. **AU** Bauwens, Luc; Hunter, John.

Hurd, Michael D.

PD October 1999. **TI** Anticipated and Actual Bequests. **AU** Hurd, Michael D.; Smith, James P. **AA** Hurd: RAND and NBER. Smith: RAND. **SR** National Bureau of Economic Research Working Paper: 7380; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 19. **PR** \$5.00. **JE** D64, D91, I12, J14. **KW** Bequests. Elderly. Life Cycle Models. Dissaving. Estate Values. Health.

AB This paper uses data on anticipated bequests from two waves of the Health and Retirement Study and the Asset and Health Dynamics of the Oldest Old (AHEAD), and on actual bequests from AHEAD. Actual bequests were measured in exit interviews given by proxy respondents for 774 AHEAD respondents who died between waves 1 and 2. Because the exit interview is representative of the elderly population, the distribution of estate values is quite different from that obtained from estate records, which represent just a wealthy subset of the population. Anticipated bequests were measured by the subjective probability of leaving bequests. Between waves 1 and 2, increases in bequest probabilities were associated with increases in the subjective probability of surviving, increments in household wealth, and widowhood while out-of-pocket medical expenses reduced the likelihood of a bequest. By comparing bequest probabilities with baseline wealth we were able to test a main prediction of the life-cycle model, that individuals will dissave at advanced old-age. The AHEAD respondents anticipate substantial dissaving before they die.

Hyndman, Rob J.

PD August 2000. **TI** A State Space Framework for Automatic Forecasting Using Exponential Smoothing Methods. **AU** Hyndman, Rob J.; Koehler, Anne B.; Snyder, Ralph D.; Grose, Simone. **AA** Hyndman, Snyder and Grose: Monash University. Koehler: Miami University. **SR** Monash Department of Econometrics and Business Statistics Working Paper: 00/09; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/. **PG** 20. **PR** no charge. **JE** C22, C32, C53. **KW** Automatic Forecasting. Exponential Smoothing. Prediction Intervals. State Space Models.

AB We provide a new approach to automatic business forecasting based on an extended range of exponential smoothing methods. Each method in our taxonomy of exponential smoothing methods can be shown to be equivalent to the forecasts obtained from a state space model. This allows (1) the easy calculation of the likelihood, the AIC and other model selection criteria; (2) the computation of prediction intervals for each method; and (3) random simulation from the underlying state space model. We demonstrate the methods by applying them to the data from the M-competition and the M3-competition.

TI Mixed Model-Based Hazard Estimation. **AU** Cai, T.; Hyndman, Rob J.; Wand, M. P.

Iannantuoni, Giovanna

TI A Spatial Voting Model Where Proportional Rule Leads to Two-Party Equilibria. **AU** De Sinopoli, Francesco; Iannantuoni, Giovanna.

Imbens, Guido W.

PD May 2000. **TI** The Analysis of Randomized Experiments with Missing Data. **AU** Imbens, Guido W.; Pizer, William A. **AA** Imbens: University of California, Los Angeles. Pizer: Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/19; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 38. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** C40, C90, J24, J64. **KW** Randomized Experiments. Random Model. Missing Data. Job-Training Program. Unemployment.

AB The otherwise straightforward analysis of randomized experiments is often complicated by the presence of missing data. In such situations it is necessary to make assumptions about the dependence of the selection mechanism on treatment, response, and covariates. The widely used approach of assuming that the data is missing at random conditional on treatment and other fully observed covariates is shown to be inadequate to describe data from a randomized experiment when partially observed covariates are also present. This paper presents an alternative to the missing at random model (MAR) which is both consistent with the data and preserves the appeal of MAR. In particular, the proposed family of models minimize the discrepancy with MAR while explaining observed deviations. The authors apply this approach to data from the Restart job training program in the United Kingdom as well as an artificial data set. Evaluation of the Restart program is not affected by the assumption of MAR; both approaches suggest that the program increased the chances of exiting unemployment by around nine percent within six months. However, analysis of the artificial data demonstrates that assuming MAR can easily lead to erroneous conclusions.

Imbs, Jean

PD October 1999. **TI** Co-Fluctuations. **AA** London Business School. **SR** Centre for Economic Policy Research Discussion Paper: 2267; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 56. **PR** 5 pounds, \$8 or 8 euros. **JE** E32, F12, F41. **KW** International Business Cycles. Trade. Sectoral Shocks.

AB This paper provides novel evidence on the determinants of the synchronization in business cycles. Trade has surprisingly small quantitative effects. On the other hand, pairs of countries with higher aggregate income level experience significantly more synchronized business cycles, and this happens largely because they have similar sectoral production patterns. Geographic considerations do not matter systematically. The results hold for a large sample of countries with very different income levels, as well as within the OECD. They are robust to different filtering devices, across yearly and quarterly frequency and for a variety of data sources. These findings are interpreted in a model where international income disparities correspond to differences in production patterns, and thus to different degrees of exposure to common sectoral stochastic developments.

Immordino, Giovanni

TI Hormone Beefs, Chloridric Chicken and International Trade: Can Scientific Uncertainty be an Informational Barrier to Trade? **AU** Calzolari, Giacomo; Immordino, Giovanni.

PD April 2000. **TI** Looking for a Guide to Protect the Environment: The Development of the Precautionary Principle. **AA** GREMAQ, Universite de Toulouse and University of

Palermo. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/17; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 21. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D81, O13. **KW** Precautionary Principle. Self-Protection. Self-Insurance. Comparative Statics. Information Structure.

AB If the precautionary principle must become the guide of the international community for environmental protection policies, an economic interpretation of the principle is in order. The analysis of case studies and a survey of the recent decision theoretic literature show on the one hand, the difficulty of applying the principle due to the vagueness of the law and, on the other, the lack of a completely satisfactory economic modelling. More generally various theoretic and empirical results demonstrate that the precautionary principle cannot be assumed to apply a priori. The precautionary principle, proposed by international treaties as a rule of thumb to be used in situations of scientific uncertainty, could indeed be inefficient.

Inder, Brett A.

TI Bayesian Trace Statistics for the Reduced Rank Regression Model. **AU** Strachan, Rodney W.; Inder, Brett A.

Inderst, Roman

PD October 2000. **TI** Bargaining with a Possibly Committed Seller. **AA** University College London. **SR** University College London Discussion Papers in Economics: 2000/16; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 36. **PR** 4 pounds or \$8.00. **JE** C78, D82. **KW** Bargaining. Commitment. Coase Conjecture. Private Information.

AB We consider bargaining with one-sided offers where the buyer has private information about his valuation, but does not know whether the seller is committed to a known price or whether it pays to hold out until he possibly reduces his offer. We focus on the gap case where there is a sure gain from trade between the non-committed seller and the buyer. We first analyze the value of the seller's possible commitment. If the gap, i.e. the difference between the seller's costs and the buyer's lowest valuation, closes, even the non-committed seller can realize (almost) the same payoff as if he were committed. Moreover, we show that the seller may prefer to bargain with a worse buyer as this enhances the value of his possible commitment. In the second part of the paper we show that the equilibrium outcome is essentially unique as the time between offers becomes sufficiently small. This is done by applying the technique developed in Abreu and Cul (2000), i.e., we prove convergence towards the unique equilibrium outcome of a corresponding game set in continuous time.

PD October 2000. **TI** Decentralized Markets with Adverse Selection. **AA** University College London. **SR** University College London Discussion Papers in Economics: 2000/17; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 22. **PR** 4 pounds or \$8.00. **JE** C70, D82, D83. **KW** Matching. Signaling. Screening. Adverse Selection. Contracts.

AB We model markets with adverse selection as matching markets. In a given match the informed or the uninformed party is chosen to make a take-it-or-leave-it proposal. This allows us

to account for the simultaneous presence of signaling and screening. Moreover, the possibility to dissolve unsuccessful matches enables us to endogenize the distribution of types in the market. Our main results are as follows. First, by simultaneously determining the distribution of types in the market and equilibrium contracts, we can overcome a well-known trade-off between ensuring existence (in signaling games) and obtaining clear-cut results (in screening games). Second, embedding contract design in a market environment with frictions allows us to detect two possibly co-existing equilibrating devices: the terms of contracting and the expected time of circulation. If the market is equilibrated (mainly) by adjusting contracts, we show convergence to the Rothschild-Stiglitz contracts as frictions vanish.

PD October 2000. **TI** Internal Competition for Corporate Financial Resources. **AU** Inderst, Roman; Laux, Christian. **AA** Inderst: University College London. Laux: University of Mannheim. **SR** University College London Discussion Papers in Economics: 2000/18; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 26. **PR** 4 pounds or \$8.00. **JE** G31, G32, J33, J41, L22. **KW** Internal Capital Markets. Capital Allocation. Incentives. Corporate Finance. Contracts.

AB The present paper considers the effect of competition for scarce corporate financial resources on managers' incentives to generate profitable investment opportunities. The authors analyze how the creation of an internal capital market affects the sensitivity of allocated resources to the relative performance of divisions. Competition is only unambiguously beneficial if projects are symmetric. While the main part of the analysis is restricted to the case where contracts may only specify monetary incentives, the authors also consider the opposite extreme where the allocation of funds is contractible. This allows for increases in the allocation's sensitivity to the quality of investment opportunities, which helps to overcome some of the problems when projects are asymmetric. Hence, distorted capital allocation in an internal capital market may serve the purpose of increasing managers' incentives. The authors also argue that renegotiations tend to eliminate the advantages of contracts on allocations for stand-alone projects, while this is never the case for integrated projects. Finally, they show that profits may decrease if a cash cow project is integrated into an existing internal capital market.

PD November 2000. **TI** Project Bundling, Liquidity Spillovers, and Capital Market Discipline. **AU** Inderst, Roman; Muller, Holger M. **AA** Inderst: University College London. Muller: University of Mannheim. **SR** University College London Discussion Papers in Economics: 2000/20; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 28. **PR** 4 pounds or \$8.00. **JE** D23, G31, G32, G34, L20. **KW** Internal Capital Markets. Diversification Discount. Firm Behavior. Incomplete Contracts. Corporate Finance.

AB This paper compares different organizational forms in terms of their ability to raise external finance if there are firm-wide credit constraints. Under decentralized finance each project borrows separately on the external capital market. Under centralized finance (CF) an intermediary borrows on the projects' behalf against their combined cash flows. Since only the projects' combined cash flow matters, CF overcomes an important externality problem between projects with different

ex post returns. On the other side, CF strengthens the firm's self-financing ability by bundling individual project cash flows, thereby overcoming barriers to investment caused by indivisibilities. But in a world where financial contracting is incomplete, firms might optimally want to commit to remain dependent on external finance. The authors' results are consistent with recent empirical observations that conglomerates trade at a lower value than a similarly diversified portfolio of stand-alone firms. According to the model, projects with a low expected cash flow should be grouped together in a conglomerate with a common internal capital market, while projects with a high expected cash flow should operate as stand-alone firms.

TI Competitive Insurance Markets Under Adverse Selection and Capacity Constraints. **AU** Wambach, Achim; Inderst, Roman.

Inman, Robert

TI Local Revenue Hills: A General Equilibrium Specification with Evidence from Four U.S. Cities. **AU** Haughwout, Andrew; Inman, Robert; Craig, Steven; Luce, Thomas.

Issler, Joao Victor

TI The Importance of Common Cyclical Features in VAR Analysis: A Monte Carlo Study. **AU** Vahid, Farshid; Issler, Joao Victor.

Jacquet, Pierre

PD December 2000. **TI** Trade Rules and Global Governance: a Long Term Agenda and The Future of Banking in Europe. **AU** Jacquet, Pierre; Pisani-Ferry, Jean; Strauss-Kahn, Dominique; Schmidt, Reinhart H. **AA** Jacquet: IFRI, Paris. Pisani-Ferry: Universite Paris-Dauphine. Strauss-Kahn: OFCE. Schmidt: Goethe University. **SR** CEPII Working Paper: 2000/22; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 32. **PR** no charge. **JE** D70, F40, G30. **KW** Governance. Collective Action. Corporate Finance. Banking. Europe. Trade Rules.

AB This paper's purpose is to argue that there is much more in the current anti-globalization crusade than the sheer amplification of anti-capitalist ideologies through media coverage and the Internet. The recent, incipient backlash against globalization is a symptom of policy failure, as policy makers have not only provided partial responses at best to legitimate concerns, but have also failed to grasp the challenges of collective action at the multilateral level. The time is now ripe to seriously address central issues related to global governance well beyond the remit of the WTO and failure to do so could result in the progressive demise of the multilateral system that has been so effective in underpinning economic prosperity in the second half of the 20th century. Recent experience suggests a two-fold challenge: how to enlist the civil society in the discussion and what guiding principles should underpin global governance efforts? The approach taken in the paper is therefore to outline an informal microeconomic framework for the future of European banking.

Jagger, Pamela

PD June 1999. **TI** El Nino, Ice Storms, and the Market for Residential Fuelwood in Eastern Canada and the Northeastern

U.S. **AU** Jagger, Pamela; White, William; Sedjo, Roger A. **AA** Jagger and Sedjo: Resources for the Future. White: Northern Forestry Centre, Canadian Forest Service, Natural Resources Canada. **SR** Resources for the Future Discussion Paper: 99/44; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 17. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D13, L73, Q21, Q23, Q42. **KW** Fuelwood. El Nino. Forestry. Extreme Weather Events. Forest Policy.

AB In January 1998 an ice storm affected eastern Canada and the northeastern United States. A survey administered to more than 1,000 households in the region indicated that fewer than half relied on wood-burning technologies for heat, but those households that did fared better -- and were less likely to leave their homes during the storm and require shelter elsewhere. Nevertheless, we found that few people were changing to wood fuel or supplementing their home heating systems with wood-burning technologies. Although demand for fuelwood increased during and after the storm, there is little evidence of widespread fuelwood shortages. A policy of promoting wood-burning technologies would benefit woodlot owners, who could enter or expand into the market for residential fuelwood when the production of other forest products, such as maple syrup and veneer, is hindered by ice storm damage.

Janeba, Eckhard

PD October 1999. **TI** Tax Competition and Trade Protection. **AU** Janeba, Eckhard; Wilson, John D. **AA** Janeba: University of Colorado at Boulder and NBER. Wilson: Michigan State University. **SR** National Bureau of Economic Research Working Paper: 7402; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 22. **PR** \$5.00. **JE** F13, F21, H25, H73, H87. **KW** Capital Taxation. Protectionism. International Trade. Subsidies. Tax Competition.

AB This paper reconsiders the question of whether tax competition for mobile capital leads to tax rates on capital that are too low or too high from the combined viewpoint of the competing regions (or countries in an economic union). In contrast to standard models of tax competition, both commodity trade and capital mobility is allowed to occur between the competing regions and the rest of the world. A key result of the analysis is that whether the capital taxes are too low or high depends on the degree of external trade protection. When the country's central government is free to set the tariff, tax competition leads to inefficiently low tax rates. But in the absence of a tariff, tax rates can be too high. In particular, regions may choose to subsidize capital in equilibrium as a means of inducing favorable terms-of-trade effects, but the subsidy (i.e., a negative tax) will then be too low because an increase in a single region's subsidy benefits other regions by reducing their relative quantities of subsidized capital. These results are discussed in the context of the European Union's Single Market, where non-EU firms have responded to the "Fortress of Europe" by increasing foreign direct investment.

Jeanne, Olivier

PD May 2001. **TI** The International Lender of Last Resort: How Large is Large Enough? **AU** Jeanne, Olivier; Wyplosz, Charles. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/76; International Monetary Fund, 700 19th Street, Washington, DC

20431. Website: www.imf.org. PG 30. PR \$10.00. JE F32, F33, G21. KW Lender of Last Resort. Bank Runs. Multiple Equilibria. Credit Crunch. Exchange Rate Regime. Dollarization. Deposit Insurance. Asian Crisis.

AB This paper considers how an international lender of last resort (LOLR) can prevent self-fulfilling banking and currency crises in emerging economies. It compares two different arrangements: one in which the international LOLR injects liquidity into international financial markets, and one in which its resources are used to back domestic banking safety nets. Both arrangements would require important changes in the global financial architecture: the first would require a global central bank issuing an international currency, while the second would have to be operated by an "international banking fund" closely involved in the supervision of domestic banking systems.

Jenkins, Robin R.

PD April 2000. TI The Determinants of Household Recycling: A Material Specific Analysis of Unit Pricing and Recycling Program Attributes. AU Jenkins, Robin R.; Martinez, Salvador A.; Palmer, Karen; Podolsky, Michael J. AA Jenkins: U.S. Environmental Protection Agency. Martinez: University of Florida. Palmer: Resources for the Future. Podolsky: Case Western University. SR Resources for the Future Discussion Paper: 99/41R; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. PG 31. PR Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. JE Q28, Q38. KW Recycling. Solid Waste. Unit Pricing.

AB This paper examines the impact of two popular solid waste programs on the percent recycled of several different materials found in the residential solid waste stream. We examine a unique, national, household-level data set containing information on the percent recycled of five different materials: glass bottles, plastic bottles, aluminum, newspaper, and yard waste. We find that access to curbside recycling has a significant and substantial positive effect on the percentage recycled of all five materials and that the level of this effect varies across different materials. The length of the recycling program's life has a significant and positive effect on two of the five materials and a mandatory recycling requirement does not affect any materials. The level of the unit price has an insignificant effect on all five materials.

Jha, Raghbendra

PD March 2001. TI An Empirical Analysis of the Impact of Public Expenditures on Education and Health on Poverty in Indian States. AU Jha, Raghbendra; Biswal, Bagala; Biswal, Urvashi D. AA Jha: Australian National University. Biswal, B.: Memorial University of Newfoundland and Queen's University. Biswal, U.: Queen's University. SR Queen's Institute for Economic Research Discussion Paper: 998; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html. PG 19. PR Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. JE H51, H52, H53, I11, I31, O15, O53. KW India. Poverty Indices. Public Health Expenditure. Public Education Expenditure. Fixed Effect Models. Random Effect Models. Panel Data.

AB The principal objective of this study is to test whether public expenditures on education, health and other

development activities have been effective in reducing poverty in India. To ensure sensitivity and robustness of the results, three different measures of poverty belonging to the Foster-Greer-Thorbecke group of poverty measures are used. We consider various types of education expenditures, viz., government expenditures on elementary, secondary, higher/university and "other" levels. Data for fourteen Indian states from 13th to 53rd rounds of National Sample Survey of India are used for estimating poverty. Using unbalanced panel data techniques, we test Fixed effects, Random effects and OLS models, and conclude that education, health and development expenditures help reduce poverty. In particular, expenditure on higher, university, technical, adult and vocational educations as opposed to elementary and secondary education is more effective in poverty reduction. Several policy conclusions are advanced.

PD December 1999. TI The Environmental Regime in Developing Countries. AU Jha, Raghbendra; Whalley, John. AA Jha: Indira Gandhi Institute of Development Research. Whalley: University of Warwick, University of Western Ontario and NBER. SR Fondazione Eni Enrico Mattei Note di Lavoro: 99/96; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 42. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE F02, F12, O13, Q17. KW Environmental Regime. Resource Degradation Costs. Environmental Kuznets Curve. Trade and Environment.

AB This paper discusses the environmental externalities that are commonly found in the developing world (the environmental regime) along with the policy responses, if any, commonly used to deal with these. Included are the effects of industrial emissions, air and water quality impacts of untreated waste (industrial and human waste), congestion effects of traffic, soil erosion, and open access resource problems (including forests). We note the tendency in much literature of the last few years to equate environmental problems in developing countries with pollutants (or emissions). The paper argues that to discuss environmental problems in developing countries (or to compare with developed countries) without reference to degradation as well as pollutants is incomplete; the effects of the former are large and pervasive, and their severity and interaction with economic process often differs sharply from that of pollutants. The paper concludes with a discussion of how environmental policy in developing countries in light of our focus on degradation effects.

Jones, Charles I.

PD October 1999. TI Was an Industrial Revolution Inevitable? Economic Growth Over the Very Long Run. AA Stanford University and NBER. SR National Bureau of Economic Research Working Paper: 7375; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 44. PR \$5.00. JE E10, N10, O31, O34, O40. KW Growth. Economic History. Property Rights. Invention. Industrial Revolution.

AB This paper studies a growth model that is able to match several key facts of economic history. For thousands of years, the average standard of living seems to have risen very little, despite increases in the level of technology and large increases in the level of the population. Then, after thousands of years of little change, the level of per capita consumption increased dramatically in less than two centuries. Quantitative analysis

of the model highlights two factors central to understanding this history. The first is a virtuous circle: more people produce more ideas, which in turn makes additional population growth possible. The second is an improvement in institutions that promote innovation, such as property rights: the simulated economy indicates that the single most important factor in the transition to modern growth has been the increase in the fraction of output paid to compensate inventors for the fruits of their labor.

Jones, Matthew T.

TI Stress Testing of Financial Systems: An Overview of Issues, Methodologies, and FSAP Experiences. **AU** Blaschke, Winfrid; Jones, Matthew T.; Majnoni, Giovanni; Peria, Soledad Martinez.

Jonung, Lars

TI The Future of EMU: What Does the History of Monetary Unions Tell Us? **AU** Bordo, Michael D.; Jonung, Lars.

Jouneau-Sion, Frederic

TI A Bayesian Approach to the Econometrics of English Auctions. **AU** Albano, Gian Luigi; Jouneau-Sion, Frederic.

PD September 2000. **TI** Auctions with Discrete Increments: A Structural Econometric Approach Based on Dominated Strategies. **AU** Jouneau-Sion, Frederic; Torres, Olivier. **AA** Jouneau-Sion: Universite de Lille 3, France and CORE. Torres: Universite de Lille 3, France. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/46; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 46. **PR** \$100 per year. **JE** C51, C52, D44, L83. **KW** Auctions. Discrete Increments. Finite Sample Inference. Simulated Inference. Dominated Strategies.

AB The authors propose a structural econometric evaluation for auctions with discrete increments. This kind of mechanism raises many theoretical difficulties. First, there are no closed form equilibrium strategies. Second, the discrete nature of the outcome complicates the inference. The authors' econometric model is built on the weak assumption that bidders do not play some given dominated strategies. This implies that the authors' results remain valid for many different kinds of equilibrium concepts. The specification of the model allows the computation of a Maximum Likelihood Estimator. Usual asymptotic tests and confidence regions derived from the likelihood function are shown to be unreliable. A new exact inference method proposed by Dufour (1998) is implemented to circumvent this difficulty. The procedure is applied to an auction in which travel agents bid for discount airline tickets. The authors also compare the rent kept by the winner of a discrete increment auction with that of a continuous auction. If the number of players is small, then the winning price is smaller when the tick is zero. In this case, the Vickrey auction is dominated by the discrete increment mechanism.

Jousten, Alain

TI Delays in Claiming Social Security Benefits. **AU** Coile, Courtney; Diamond, Peter; Gruber, Jonathan; Jousten, Alain.

Judd, Kenneth L.

PD May 2000. **TI** Asset Trading Volume with Dynamically Complete Markets and Heterogeneous Agents. **AU** Judd, Kenneth L.; Kubler, Felix; Schmedders, Karl. **AA** Judd and Kubler: Stanford University. Schmedders: Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1294; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 23. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C63, G11, G12. **KW** Trading Volume. Complete Markets. Infinite Horizon Models. Asset Pricing. Portfolio Choice.

AB The trading volume of long-lived securities with recursive payoffs, such as equity, is generically zero in infinite-horizon recursive pure exchange Lucas asset models with heterogeneous agents. In equilibrium, there is no portfolio rebalancing of such assets. More generally, the end-of-period portfolio of long- and short-lived securities is constant over time and states in the generic economy. We also present a nonrobust formulation of dynamically complete markets which does have nonzero trading volume in equilibrium. The comparisons show that any theory of asset trading volume will be very sensitive to small changes in model specifications.

Juillard, Michel

TI Economic Consequences of Pension Reforms in Europe: An Investigation with the INGENUE World Model. **AU** Aglietta, Michel; Chateau, Jean; Fayolle, Jacky; Juillard, Michel; Le Cacheux, Jacques; Legarrec, Gilles; Touze, Vincent.

TI Economic Consequences of Pension Reforms in Europe: An Investigation with the INGENUE World Model. **AU** Aglietta, Michel; Chateau, Jean; Fayolle, Jacky; Juillard, Michel; Le Cacheux, Jacques; Legarrec, Gilles; Touze, Vincent.

Kadareja, Arjan

TI Marmotte: A Multinational Model. **AU** Cadiou, Loic; Dees, Stephane; Guichard, Stephanie; Kadareja, Arjan; Laffargue, Jean-Pierre; Rzepkowski, Bronka.

TI Marmotte: A Multinational Model. **AU** Cadiou, Loic; Dees, Stephane; Guichard, Stephanie; Kadareja, Arjan; Laffargue, Jean-Pierre; Rzepkowski, Bronka.

Kagugube, Johnson

TI Changes in Poverty in Uganda, 1992-1997. **AU** Appleton, Simon; Emwanu, Tom; Kagugube, Johnson; Muwonge, James.

Kalai, Ehud

PD January 2000. **TI** Randomization and Simplification. **AU** Kalai, Ehud; Solan, Eilon. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1283; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 10. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern

University. **JE** D11, D81, D91. **KW** Randomization. Decision-Making. Stochastic Rules. Simple Decision Rules. **AB** Randomization may add beneficial flexibility to the construction of optimal simple decision rules in dynamic environments. A decision maker, restricted to the use of simple rules, may find a stochastic rule that strictly outperforms all deterministic ones. This is true even in highly separable Markovian environments where the set of feasible choices is stationary and the decision maker's choices have no influence on future payoff functions. In separable environments, however, the period selection of an action can still be deterministic; only the transitions in the evolution of his behavior may require randomization.

Kalb, Guyonne

TI Are Casual Jobs a Freeway to Permanent Employment?
AU Chalmers, Jenny; Kalb, Guyonne.

Kanwar, Sunil

PD June 2001. **TI** Does Intellectual Property Protection Spur Technological Change? **AU** Kanwar, Sunil; Evenson, Robert. **AA** Kanwar: University of Delhi. Evenson: Yale University. **SR** Yale Economic Growth Center Discussion Paper: 831; Economic Growth Center, Publications Office, Yale University, P.O. Box 208269, Yale Station, New Haven CT 06520-8269. Website: www.library.yale.edu/socsci/egcpage.html. **PG** 25. **PR** \$2.00 plus postage. **JE** O31, O34. **KW** Intellectual Property Rights. Technological Change. Economic Growth.

AB Of the diverse factors motivating technological change, one factor that has received increasing attention in the recent past has been the protection of intellectual property rights. Given fairly recent changes in the international policy ethos where a regime of stronger intellectual property protection has become a fait accompli for most developing countries, it is of some significance to ask whether more stringent protection of intellectual property does indeed encourage innovation. And this is the question that this paper examines, utilizing cross-country panel data on R&D investment, patent protection and other country-specific characteristics spanning the period 1981-1990. The evidence unambiguously indicates the significance of intellectual property rights as incentives for spurring innovation.

Kaufman, George G.

PD June 2001. **TI** Post-Resolution Treatment of Depositors at Failed Banks: Implications for the Severity of Banking Crises, Systemic Risk, and Too-Big-To-Fail. **AU** Kaufman, George G.; Seelig, Steven A. **AA** Kaufman: Loyola University. Seelig: International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/83; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 20. **PR** \$10.00. **JE** G21, G28. **KW** Deposit Insurance. Bank Failure. Banking Crisis. Systemic Risk.

AB Losses may accrue to depositors at insolvent banks both at and after the time of official resolution. Losses at resolution occur if depositors' access to their claims is delayed or "frozen." While the sources and implications of losses at resolution have been analyzed previously, the sources and implications of losses after resolution have received little attention. This paper examines the causes of delayed depositors' access to their funds at resolved banks, describes

how the FDIC provides immediate access, reports on special survey of access practices in other countries, and analyzes the costs and benefits of delayed access in terms of both the effects on market discipline and depositor pressure to protect all deposits.

Keen, Michael

TI Redistribution. **AU** Boadway, Robin; Keen, Michael.

Kell, Michael

PD July 2001. **TI** An Assessment of Fiscal Rules in the United Kingdom. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/91; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 30. **PR** \$10.00. **JE** E61, E62, H62, H63. **KW** Fiscal Rules. Fiscal Sustainability. Intergenerational Equity. Transparency.

AB The paper assesses the United Kingdom's golden rule and debt rule against "ideal characteristics" of fiscal rules. It concludes that they are clearly defined; transparent in institutional arrangements and measurement; adequate to ensure sustainability; and strike a good balance between flexibility and enforceability. The rules could be strengthened by clarifying the benchmark embodied in the debt rule and the modalities of the "value for money" criterion for investment. Overall, the fiscal framework establishes the necessary preconditions for a credible fiscal policy, but the credibility of the rules could be undermined by the large gap between them and actual medium-term fiscal plans.

Keller, Wolfgang

PD September 1999. **TI** Environmental Compliance Costs and Foreign Direct Investment Inflows to U.S. States. **AU** Keller, Wolfgang; Levinson, Arik. **AA** Keller: University of Texas and NBER. Levinson: University of Wisconsin and NBER. **SR** National Bureau of Economic Research Working Paper: 7369; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** \$5.00. **JE** F21, F23, H73, L50, Q28. **KW** Environmental Regulation. Foreign Direct Investment. International Investment.

AB This paper estimates the extent to which changing environmental standards have altered patterns of international investment. The analysis goes beyond the existing literature in three ways. First, the authors avoid comparing regulations in different countries by using data on inward foreign direct investment (FDI) to the U.S. and on differences in the regulatory stringency in U.S. states which are more comparable than different countries and are more similar than countries in other difficult-to-measure dimensions. Second, the authors' measure of environmental stringency accounts for differences in states' industrial compositions, an acknowledged problem for earlier studies. Third, the authors employ a panel of annual measures of relative regulatory stringency from 1977 to 1994, allowing them to control for unobserved state characteristics that may be correlated with both FDI and compliance costs. They find some evidence of small deterrent effects of environmental regulations in particularly pollution-intensive industries, but no evidence of large or widespread effects. While the broad conclusions are consistent with the existing literature, this paper does address three important concerns with that literature.

Kemfert, Claudia

PD January 2000. **TI** The Impacts of Emissions Trading on World Economies. **AA** University of Stuttgart. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/01; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 23. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** E17, F01, F02, Q21. **KW** Emissions Reductions. Annex B Emissions. Trading Permits. Energy Economics Baseline Definition.

AB This paper illustrates different scenarios of implementing an emissions trading scheme and investigates the economic implications of diverse baseline development paths and an additional limitation or ceiling on emissions trading. The analysis focuses on the impacts of dissimilar emissions reductions options, i.e. to decrease emissions by domestic action or by Annex B emissions trading. World economic impacts are investigated by a world general equilibrium model including 11 international regions and 4 production sectors. Various strategies including flexible instruments, like a ceiling on regional emissions trading and the interregional and intertemporal trade of emissions permits are simulated, compared and evaluated. It turns out that meeting the Kyoto target induces welfare losses to developed and developing countries, an emissions trading option can reduce global and regional welfare losses significantly. Essentially, these welfare losses depend considerably on assumed emissions baseline paths. A ceiling on emissions trading scheme diminishes positive economic effects on global and regional welfare, especially within economies in transition.

PD December 1999. **TI** The Liberalisation Process of the German Electricity Market Strategies and Opportunities. **AA** University of Stuttgart, Germany. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 99/95; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 20. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C71, C72, D21, Q41, R32. **KW** Game Theoretic Model. Electricity Market. Liberalization.

AB Within this paper an oligopolistic German electricity market is modeled by a game theoretic modeling tool representing a Nash equilibrium. Due to European electricity market liberalization electricity producing and trading firms react strategically like global market players by joining and merging market shares and gains. On the way to perfect competition within the electricity market strategic behavior like co-operation or refusal of collaboration or net access will determine the development of a market and energy suppliers structure. Presently, the German electricity market is determined by strategic behavior of energy firms so that a full competitive market has not been reached yet. It turns out that the Nash equilibrium solution fulfils the optimal criteria of mathematical solution whereas the full competition scenario leads to implausible high market shares resulting though in an oligopolistic market structure characterized by a Nash equilibrium. Within the Nash equilibrium mutual profit maximization and strategic behavior lead to regional market shares by firm mergers and establish regional price variations resulting in distinctive net trades.

Kempf, Hubert

TI Designing Stabilization Policy in a Monetary Union. **AU** Cooper, Russell; Kempf, Hubert.

Kessler, Daniel P.

PD February 2000. **TI** How Liability Law Affects Medical Productivity. **AU** Kessler, Daniel P.; McClellan, Mark B. **AA** Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7533; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 33. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside US). **JE** I11, K32, K41. **KW** Malpractice Reform. Liability.

AB Previous research suggests that "direct" reforms to the liability system -- reforms designed to reduce the level of compensation to potential claimants -- reduce medical expenditures without important consequences for patient health outcomes. We extend this research by identifying the mechanisms through which reforms affect the behavior of health care providers. Although we find that direct reforms improve medical productivity primarily by reducing malpractice claims rates and compensation conditional on a claim, our results suggest that other policies that reduce the time spent and the amount of conflict involved in defending against a claim can also reduce defensive practices substantially. In addition, we find that "malpractice pressure" has a larger impact on diagnostic rather than therapeutic treatment decisions. Our results provide an empirical foundation for simulating the effects of untried malpractice reforms on health care costs and outcomes, based on their predicted effect on the malpractice pressure facing medical providers.

PD February 2000. **TI** Medical Liability, Managed Care, and Defensive Medicine. **AU** Kessler, Daniel P.; McClellan, Mark B. **AA** Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7537; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 24. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside US). **JE** I11, K32, K41. **KW** Malpractice Reform. Liability. Managed Health Care.

AB Because the optimal level of medical malpractice liability depends on the incentives provided by the health insurance system, the rise of managed care in the 1990s may affect the relationship between liability reform and defensive medicine. In this paper, we assess empirically the extent to which managed care and liability reform interact to affect the cost of care and health outcomes of elderly Medicare beneficiaries with cardiac illness. Malpractice reforms that directly reduce liability pressure -- such as caps on damages -- reduce defensive practices both in areas with low and with high levels of managed care enrollment. In addition, managed care and direct reforms do not have long-run interaction effects that are harmful to patient health. However, at least for patients with less severe cardiac illness, managed care and direct reforms are substitutes, so the reduction in defensive practices that can be achieved with direct reforms is smaller in areas with high managed care enrollment. We consider some implications of these results for the current debate over the appropriateness of extending malpractice liability to managed care organizations.

Khazzoom, J. Daniel

PD May 2000. **TI** Pay-At-The-Pump (PATP) Auto Insurance: Criticisms and Proposed Modifications. **AA** San Jose State University. **SR** Resources for the Future

Discussion Paper: 99/14R; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. PG 54. PR Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. JE G22, L50, Q20, Q40, R40. KW Pay-at-the-Pump. Automobile Insurance. Distance-Based Insurance. Efficient Pricing. Uninsured Motorists.

AB In 1998 the U.S. Environmental Protection Agency sponsored an effort to examine the criticisms and concerns expressed about Pay-at-the-Pump (PATP) auto insurance and explore the reformulation of PATP, taking into account these concerns. This paper provides a brief exposition of PATP and its main advantages followed by a review of its criticisms and concerns. We outline a reconstituted PATP proposal emerging from the review of these criticisms: a hybrid system that merges the best features from PATP and the existing insurance system. It retains what is consistent with the free market operation and market incentive in the existing system. At the same time it restores the price signal, the sine qua non for economic efficiency, where it has been extinguished in the existing insurance system. The reconstituted proposal capitalizes on the pricing efficiency feature that characterizes PATP, which in turn leads to a reduction in insurance cost, enhanced safety, elimination of resource misallocation, enhanced equity and reduction (possibly elimination) of accident-cost externalities. In addition, it benefits society at large with improved environment, improved balance of payments, enhanced U.S. security, and a redress to the human dimension of the uninsured motorist problem.

Kilian, Lutz

TI A Monetary Explanation of the Great Stagflation of the 1970s. AU Barsky, Robert; Kilian, Lutz.

King, Robert G.

PD February 2000. **TI** Resuscitating Real Business Cycles. AU King, Robert G.; Rebelo, Sergio T. AA King: University of Virginia and National Bureau of Economic Research. Rebelo: Northwestern University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7534; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. PG 63. PR \$10.00 per copy (plus \$10.00 per order for shipping outside US). JE E10, E32. KW Business Cycles. Monetary Models.

AB The Real Business Cycle (RBC) research program has grown spectacularly over the last decade, as its concepts and methods have diffused into mainstream macroeconomics. Yet, there is increasing skepticism that technology shocks are a major source of business fluctuations. This chapter expounds the basic RBC model and shows that it requires large technology shocks to produce realistic business cycles. While Solow residuals are sufficiently volatile, these imply frequent technological regress. Productivity studies permitting unobserved factor variation find much smaller technology shocks, suggesting the imminent demise of real business cycles. However, we show that greater factor variation also dramatically amplifies shocks: a RBC model with varying capital utilization yields realistic business cycles from small, nonnegative changes in technology.

Kingdon, Geeta

PD 2000. **TI** Are Searching and Non-Searching Unemployment Distinct States when Unemployment is High?

The Case of South Africa. AU Kingdon, Geeta; Knight, John. AA CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/02; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. PG 21. PR 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). JE J22, J63, J64. KW South Africa. Unemployment. Job Search.

AB Broadly and narrowly measured unemployment rates differ very markedly in certain countries, and the measure chosen to be the "official" unemployment rate affects perceptions about the extent of the problem. The appropriate measure of the unemployment rate depends on whether jobless persons who say they want work but who are not actively searching should be regarded as part of the labor force. This paper examines whether the non-searching-unemployed state is distinct from the searching-unemployed state in a developing country -- South Africa -- where the broad unemployment rate and the gap between the broad and narrow rates are both very high. It asks whether lack of job-search among jobless persons claiming to want work is an outcome of tastes or of constraints. It finds evidence in support of adopting the broad definition.

PD 1999. **TI** Unemployment and Wages in South Africa: A Spatial Approach. AU Kingdon, Geeta; Knight, John. AA CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/1999/12; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. PG 32. PR 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). JE J31, J64. KW Wages. Unemployment. Wage Curve. South Africa.

AB A large amount of recent evidence finds a negative relationship between local unemployment and wages in OECD countries, a relationship christened a "wage curve". This contradicts the conventional model of the labor market in which high unemployment regions have higher wages to compensate for search and other costs. This paper discovers a wage curve in South Africa, a country with several times the typical unemployment rate of OECD countries. The wage curve elasticity in South Africa is similar to that in OECD countries (-0.1) but persists over a much larger range of unemployment rates, implying that unemployment can have a large impact on wages in South Africa. However, this wage flexibility does not extend to union wages which are well insulated from local unemployment conditions. The results here also shed light on the segmentation of the labor market based on labor immobility and on the debate about the appropriate definition of unemployment in South Africa.

Kinsey, Bill

TI The Impact of Agricultural Extension on Farm Production in Resettlement Areas of Zimbabwe. AU Owens, Trudy; Hoddinott, John; Kinsey, Bill.

TI Revisiting Forever Gained: Income Dynamics in the Resettlement Areas of Zimbabwe, 1983-1997. AU Gunning, Jan Willem; Hoddinott, John; Kinsey, Bill; Owens, Trudy.

Klein, Michael W.

PD August 1999. **TI** Capital Account Liberalization, Financial Depth, and Economic Growth. AU Klein, Michael W.; Olivei, Giovanni. AA Klein: Tufts University, Federal Reserve Bank of Boston and NBER. Olivei: Federal Reserve

Bank of Boston. **SR** Federal Reserve Bank of Boston Working Paper: 99/06; Research Library, Federal Reserve Bank of Boston, P.O. Box 2076, Boston, MA 02106-2076. Website: www.bos.frb.org/economic/wpchrono.htm. **PG** 24. **PR** no charge. **JE** F32, F36, O16. **KW** International Capital Flows. Finance. Growth.

AB We show a statistically significant and economically relevant effect of open capital accounts on financial deepness and economic growth in a cross-section of countries over the period 1986 to 1995. Countries with open capital accounts over some or all of this period had a significantly greater increase in financial depth than countries with continuing capital account restrictions, and they also enjoyed greater economic growth. These results, however, are largely driven by the developed countries included in the sample. The observed failure of capital account liberalization to promote financial deepness among developing countries suggests potentially important policy implications concerning the desirability of opening up the capital account.

PD October 1999. **TI** Capital Account Liberalization, Financial Depth, and Economic Growth. **AU** Klein, Michael W.; Olivei, Giovanni. **AA** Klein: Tufts University and NBER. Olivei: Federal Reserve Bank of Boston. **SR** National Bureau of Economic Research Working Paper: 7384; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 22. **PR** \$5.00. **JE** F13, F36, F43, O16, O19. **KW** Capital Accounts. Open Economy. Growth. Financial Depth. Developing Countries.

AB See the abstract for Klein, Michael W.; Olivei, Giovanni. "Capital Account Liberalization, Financial Depth, and Economic Growth", August 1999. Federal Reserve Bank of Boston Working Paper: 99/06; Research Library, Federal Reserve Bank of Boston, P.O. Box 2076, Boston, MA 02106-2076. Website: www.bos.frb.org/economic/wpchrono.htm.

PD November 1999. **TI** Job Creation, Job Destruction, and the Real Exchange Rate. **AU** Klein, Michael W.; Schuh, Scott; Triest, Robert K. **AA** Klein: Tufts University, Federal Reserve Bank of Boston and NBER. Schuh and Triest: Federal Reserve Bank of Boston. **SR** Federal Reserve Bank of Boston Working Paper: 99/11; Research Library, Federal Reserve Bank of Boston, P.O. Box 2076, Boston, MA 02106-2076. Website: www.bos.frb.org/economic/wpchrono.htm. **PG** 35. **PR** no charge. **JE** E24, F16, F41, J63. **KW** Gross Job Flows. Employment Adjustment. Worker Dislocation. Exchange Rate.

AB This paper contributes to an understanding of internationally generated adjustment costs by demonstrating a statistically significant and economically relevant effect of the real exchange rate on job creation and job destruction in U.S. manufacturing industries over the period 1973 to 1993. The responsiveness of these gross job flows to the real exchange rate reflects pervasive heterogeneity with respect to international conditions across firms, even within narrowly defined industries. We document this heterogeneity and show that the responsiveness of job flows to movements in the real exchange rate varies with the industry's openness to international trade. We also show an asymmetry in the responsiveness of job flows to the real exchange rate; appreciations play a significant role in job destruction, but job flows do not respond significantly to dollar depreciations.

Knarvik, Karen-Helene Midelfart

TI A U-Shaped Europe? A Simulation Study of Industrial Location. **AU** Forslid, Rikard; Haaland, Jan I.; Knarvik, Karen-Helene Midelfart

Knight, John

TI Are Searching and Non-Searching Unemployment Distinct States when Unemployment is High? The Case of South Africa. **AU** Kingdon, Geeta; Knight, John.

TI Education Externalities in Rural Ethiopia: Evidence From Average and Stochastic Frontier Production Functions. **AU** Weir, Sharada; Knight, John.

TI Adoption and Diffusion of Agricultural Innovations in Ethiopia: The Role of Education. **AU** Weir, Sharada; Knight, John.

TI Unemployment and Wages in South Africa: A Spatial Approach. **AU** Kingdon, Geeta; Knight, John.

Koehler, Anne B.

TI A State Space Framework for Automatic Forecasting Using Exponential Smoothing Methods. **AU** Hyndman, Rob J.; Koehler, Anne B.; Snyder, Ralph D.; Grose, Simone.

TI Forecasting for Inventory Control With Exponential Smoothing. **AU** Snyder, Ralph D.; Koehler, Anne B.; Ord, Keith.

Kofman, Paul

TI Bayesian Soft Target Zones. **AU** Forbes, Catherine S.; Kofman, Paul.

Kongsamut, Piyabha

PD June 2001. **TI** Beyond Balanced Growth. **AU** Kongsamut, Piyabha; Rebelo, Sergio T.; Xie, Danyang. **AA** Kongsamut and Xie: International Monetary Fund. Rebelo: Northwestern University and National Bureau of Economic Research. **SR** International Monetary Fund Working Paper: WP/01/85; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 11. **PR** \$10.00. **JE** O14, O41. **KW** Growth. Structural Change. Kaldor Facts.

AB Balanced growth models are commonly used in macroeconomics because they are consistent with the well-known Kaldor facts regarding economic growth. These models, however, are inconsistent with one of the most striking regularities of the growth process -- the massive reallocation of labor from agriculture into manufacturing and services. This paper presents a simple model consistent with both the Kaldor facts and the dynamics of sectoral labor reallocation. The model shows the balanced growth can be consistent with structural change.

PD August 2001. **TI** Philippines: Preparations for Inflation Targeting. **AA** IMF. **SR** International Monetary Fund Working Paper: WP/01/99; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 13. **PR** \$10.00. **JE** C22, C32, E31, E37, E52. **KW** Philippines. Inflation. Targeting. Inflation Modeling.

AB The Philippines is planning to shift toward adoption of an inflation-targeting framework in 2001. This paper reviews key policy issues in this context, describes various operational and

technical preparations, and presents an empirical analysis of the factors driving inflation. While central bank independence appears assured, the exchange rate has been allowed to fluctuate freely, and the authorities are embarking on a medium-term plan for fiscal consolidation. Empirical results suggest that the effective exchange rate (rather than a bilateral rate) and wages are important long-run influences on inflation.

Konings, Jozef

PD October 1999. **TI** Gross Job Flows and Firm Growth in Transition Countries: Evidence Using Firm Level Data on Five Countries. **AU** Konings, Jozef; Faggio, Giulia. **AA** LICOS Institute. **SR** Centre for Economic Policy Research Discussion Paper: 2261; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 44. **PR** 5 pounds, \$8 or 8 euros. **JE** J60, P20. **KW** Job Creation. Job Destruction. Transition Economies. **AB** This paper analyzes job flows in Poland, Estonia, Slovenia, Bulgaria and Romania. According to comparable firm level data from 1993-1997, early transition job destruction dominates job creation, while the latter picks up as the country enters into a mature stage of transition. Gross job reallocation rates in more advanced transition countries are comparable to 'Western economies'. The restructuring process is a heterogeneous one in terms of job creation and destruction. Even in transition countries, hit by very large negative shocks, job creation and destruction occurs simultaneously. In addition, most of the job reallocation occurs within, rather than across, sectors and regions. A measure for restructuring is the excess job reallocation rate, which is positively correlated with the net employment growth rate at the sector and regional level. Finally, ownership and firm size are the most relevant characteristics for understanding the dynamics of job flows. Foreign firms have higher job creation and higher excess job reallocation rates, while small businesses are the most dynamic in terms of job reallocation. Firm growth depends on ownership and initial size. Trade orientation effects are important for countries in early transition but not for countries in a more mature stage of the transition process.

Konisky, David M.

TI Environmental Implications of the Foodservice and Food Retail Industries. **AU** Davies, Terry; Konisky, David M.

PD August 1999. **TI** Comparative Risk Projects: A Methodology for Cross-Project Analysis of Human Health Risk Rankings. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/46; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 38. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** I18, I19, Q28. **KW** Comparative Risk Analysis. Health. Risk Rankings. Environmental Policy. Cross-Project Analysis. **AB** Public agencies at all levels of government have conducted comparative risk projects to inform environmental priority-setting efforts. Using the analytic policy tool, comparative risk analysis (CRA), most projects have ranked environmental problems in terms of the relative risks they pose to human health and other endpoints. Differences in project design complicate cross-project analysis of the risk ranking results. This paper discusses important project design variations that complicate cross-project analysis and presents a methodology that provides a simple, straightforward approach for comparing risk ranking results that overcomes some of

these project-specific idiosyncrasies. The methodology provides a mechanism to help practitioners of CRA determine how their risk ranking results compare with other projects. The paper also illustrates how the methodology can be applied to develop a consolidated ranking of the most often ranked environmental health problems. Thirty-nine completed human health CRAs are analyzed to determine which ten environmental problems have most often been cited in comparative risk projects as posing the most significant threats to human health.

TI Public Participation in Environmental Planning in the Great Lakes Region. **AU** Beierle, Thomas C.; Konisky, David M.

Kotlikoff, Laurence J.

TI Social Security's Treatment of Postwar Americans: How Bad Can it Get? **AU** Gokhale, Jagadeesh; Kotlikoff, Laurence J.

Kraus, Thomas

PD June 2001. **TI** The Impact of the EMU on the Structure of European Equity Returns: An Empirical Analysis of the First 21 Months. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/84; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 16. **PR** \$10.00. **JE** F33, F36, G14, G15. **KW** Euro. European Monetary Union. Equity Markets. Correlations. Industry Sectors. Factor Models.

AB Using symmetric data sets of 92 weekly return observations before and after the introduction of the euro, the paper analyzes the impact of the new currency on the return structure of equity markets in the European Monetary Union. Variance decompositions, cluster analyses, and principle component analyses are used to explore the changes in the structural relations. European industry factors are found to have dramatically increased in importance with the launch of the single currency, and a new "country-size" factor in European stock returns is detected. Furthermore, inner-European correlations are documented to have been reduced sharply with the start of the monetary union.

Krishnan, Pramila

PD 2000. **TI** Public Sector Pay and Private Sector Wage Premiums: Testing Alternative Models of Wage Determination. **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/07; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csaee.ox.ac.uk/. **PG** 30. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** J31, J33, J41, J45. **KW** Reservation Wages. Efficiency Wages. Matched Survey. Panel Data.

AB The paper focuses on a labor market dominated by a public sector where the links between pay and effort are weak, as in many developing countries. This feature is incorporated in an extension of the basic Shapiro-Stiglitz model of shirking in order to explain the co-existence of high wages (in both private and public sectors) and high unemployment. Using data from panel surveys of households and of manufacturing firms, the empirical test attempts to identify why firms in the private sector do not bid down wages but offer a premium over the reservation wage of the marginal worker. The robustness of the

premium is tested by controlling for the heterogeneity of workers, and the dispersion in wage offers and reservation wages of workers relative to the marginal worker. The premium appears to be driven by efficiency wage considerations rather than alternatives such as bargaining models and specific investments in workers.

TI Demobilisation, Land and Household Livelihoods: Lessons from Ethiopia. **AU** Ayalew, Daniel; Dercon, Stefan; Krishnan, Pramila.

Krolzig, Hans-Martin

TI The European Business Cycle. **AU** Artis, Michael J.; Krolzig, Hans-Martin; Toro, Juan.

Kroszner, Randall S.

PD March 2000. **TI** Obstacles to Optimal Policy: The Interplay of Politics and Economics in Shaping Bank Supervision and Regulation Reforms. **AU** Kroszner, Randall S.; Strahan, Philip E. **AA** Kroszner: University of Chicago and National Bureau of Economic Research. Strahan: Federal Reserve Bank of New York. **SR** National Bureau of Economic Research Working Paper: 7582; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 35. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** D72, D78, G21, G28, L51. **KW** Federal Deposit Insurance Corporation Improvement Act (FDICIA). Regulation. Voting Behavior.

AB This paper provides a positive political economy analysis of the most important revision of the U.S. supervision and regulation system during the last two decades, the 1991 Federal Deposit Insurance Corporation Improvement Act (FDICIA). By analyzing the impact of private interest groups as well as political-institutional factors on the voting patterns on amendments related to FDICIA and its final passage, an assessment is made of the empirical importance of different types of obstacles to welfare-enhancing reforms. Rivalry of interests within the industry (large versus small banks) and between industries (banks versus insurance) as well as between measures of legislator ideology and partisanship lay important roles and, hence, should be taken into account in order to implement successful change. A "divide and conquer" strategy with respect to the private interests appears to be effective in bringing about legislative reform. The concluding section draws tentative lessons from the political economy approaches about how to increase the likelihood of welfare-enhancing regulatory change.

Krueger, Alan B.

PD March 2000. **TI** Education for Growth: Why and For Whom? **AU** Krueger, Alan B.; Lindahl, Mikael. **AA** Krueger: Princeton University and National Bureau of Economic Research. Lindahl: Stockholm University. **SR** National Bureau of Economic Research Working Paper: 7591; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 44. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** E20, J24. **KW** Education. Human Capital Formation.

AB This paper tries to reconcile evidence from the microeconomic and empirical macro growth literatures on the effect of schooling on income and GDP growth. Much evidence suggests that education is an important causal

determinant of income for individuals within countries. At a national level, however, recent studies have found that increases in educational attainment are unrelated to economic growth. This finding appears to be a spurious result of the extremely high rate of measurement error in first-differenced cross-country education data. After accounting for measurement error, the effect of changes in educational attainment on income growth in cross-country data is at least as great as microeconomic estimates of the rate of return to years of schooling. Another finding of the macro growth literature -- that economic growth depends positively on the initial stock of human capital -- is shown to result from imposing linearity and constant-coefficient assumptions on the estimates. These restrictions are often rejected by the data, and once either assumption is relaxed, the initial level of education has little effect on economic growth for the average country.

Krupnick, Alan

PD April 2000. **TI** Cost-Effective NOx Control in the Eastern United States. **AU** Krupnick, Alan; McConnell, Virginia D. **AA** Krupnick: Resources for the Future. McConnell: Resources for the Future and University of Maryland, Baltimore. **SR** Resources for the Future Discussion Paper: 00/18; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 34. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** Q25, Q28, Q48. **KW** Nitrogen Oxide. Air Quality. Tradable Permits. Climate Change. Environmental Policy.

AB Reducing nitrogen oxide (NOx) emissions is the focus of efforts to meet ozone air quality goals and lower particulate matter concentrations. What is the best approach to reducing emissions beyond what is specified in the 1990 amendments to the Clean Air Act? First, we analyze proposals from the Environmental Protection Agency (EPA) -- a command-and-control approach for electric utilities and other point sources, and ton-for-ton NOx emissions trading -- and find that the targets can be met at roughly half the cost under a trading program when there are no transaction costs. We then examine several alternatives that could improve on the EPA trading plan, including spatially differentiated permit systems and programs that include other point sources and other pollutants. EPA's program appears more cost-effective than the complex trading programs if a high estimate of health benefits is used. Without this controversial assumption, the agency's NOx reduction target is too large.

TI Location Efficient Mortgages: Is the Rationale Sound? **AU** Blackman, Allen; Krupnick, Alan.

PD August 1998. **TI** The Chesapeake Bay and the Control of Nox Emissions: A Policy Analysis. **AU** Krupnick, Alan; McConnell, Virginia D.; Austin, David; Cannon, Matt; Stoessell, Terrell; Morton, Brian. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/46; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 74. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** Q25, Q28. **KW** Chesapeake Bay. Cost Effectiveness. Air Pollution. Environmental Regulation. Nitrogen Oxide.

AB Nitrogen oxide emissions not only affect air quality but have recently been found to be an important source of nitrate pollution in the Chesapeake Bay. This analysis examines the costs, emissions, source-specific and location-specific

allocations of Nox emissions reductions and the ancillary ozone related health benefits under a range of policy scenarios. The paper includes analysis of three separate policies. The first is a detailed analysis of the effect on nitrate loadings to the Bay of command and control policies specified in the Clean Air Act and as part of the OTAG process. The second is a comparison of alternative scenarios for reducing Nox emissions that meet nitrate loading goals, with or without concern for reducing ozone concentrations and the health effects they cause. The third is a comparison of alternative approaches to allocate Nox emissions to meet Nox reduction and ozone exposure goals while capturing the ancillary effect on nitrate loadings. This last analysis focuses on the stake the Bay jurisdictions have in the outcome of negotiations over Nox trading programs being developed by EPA for reducing ozone in the Eastern U.S.

TI The Benefits of Air Pollutant Emissions Reductions in Maryland: Results from the Maryland Externalities Screening and Valuation Model. **AU** Austin, David; Krupnick, Alan; Burtraw, Dallas; Stoessell, Terrell.

TI Measuring the Value of Health Improvements from Great Lakes Cleanup. **AU** Burtraw, Dallas; Krupnick, Alan.

PD August 1999. **TI** Mortality Risk Valuation for Environmental Policy. **AU** Krupnick, Alan; Alberini, Anna; Cropper, Maureen; Simon, Nathalie. **AA** Krupnick: Resources for the Future. Alberini: University of Colorado. Cropper: University of Maryland and The World Bank. Simon: U.S. Environmental Protection Agency. **SR** Resources for the Future Discussion Paper: 99/47; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 25. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** C10, I12, I18, Q28. **KW** Mortality Risk Valuation. Contingent Valuation. Health Production. Environmental Policy. Air Pollution.

AB Most benefit-cost analyses of reductions in air pollutants and other pollutants carrying mortality risks rely on estimates of the value of reductions in such risks produced by compensating wage studies, or contingent valuation studies that value risk reductions in the context of transport or job-related accidents. As the authors argue below, these estimates are inappropriate when valuing risk changes produced by environmental programs. The objectives of this paper are to explain why these estimates are inappropriate and to describe an improved approach to valuing reductions in risk of death from environmental programs, especially programs to reduce air pollution. The authors have implemented this approach in a pilot study in Tokyo, Japan. The paper provides estimates of the value of a statistical life based on the pilot study and describes extensions of the approach based on test results.

TI Ancillary Benefits of Reduced Air Pollution in the U.S. from Moderate Greenhouse Gas Mitigation Policies in the Electricity Sector. **AU** Burtraw, Dallas; Krupnick, Alan; Palmer, Karen; Paul, Anthony; Toman, Michael; Bloyd, Cary.

Kubler, Felix

PD February 2000. **TI** Incomplete Markets, Transitory Shocks, and Welfare. **AU** Kubler, Felix; Schmedders, Karl. **AA** Kubler: Stanford University. Schmedders: Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1285; Center for Mathematical Studies in Economics and Management Science, Northwestern University,

2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 22. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D52, D58, D61. **KW** Incomplete Markets. Welfare. Transitory Shocks. Patience. General Equilibrium.

AB While equilibrium allocations in models with incomplete markets are generally not Pareto-efficient, it is often argued that quantitative welfare losses from missing assets are small when time-horizons are long and shocks are transitory. In this paper we use a computational analysis to show that even in the simplest infinite horizon model without aggregate uncertainty welfare losses can be substantial. Furthermore we show that in this model welfare losses from incomplete markets do not necessarily disappear when agents become more patient. We identify two scenarios under which this is the case. First, when the economic model is calibrated to higher frequency data, the persistence of negative income shocks must increase as well. In this case, the welfare loss of incomplete markets remains constant even as agents' rate of time preference goes to one. Secondly, for a fixed specification of endowment processes, an exogenous decrease of agents' rate of discounting should not affect their abilities to borrow. With exogenous borrowing constraints, the incomplete market's welfare does not converge to the complete market's welfare.

TI Asset Trading Volume with Dynamically Complete Markets and Heterogeneous Agents. **AU** Judd, Kenneth L.; Kubler, Felix; Schmedders, Karl.

Kumar, Alok

PD December 2000. **TI** A Computational Analysis of the Core of a Trading Economy with Three Competitive Equilibria and a Finite Number of Traders. **AU** Kumar, Alok; Shubik, Martin. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1290; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. **PG** 24. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** C62, C71, D50. **KW** Core. Competitive Equilibria. Speed of Convergence. Sensitivity Analysis.

AB This paper examines the structure of the core of a trading economy with three competitive equilibria as the number of traders (N) is varied. The authors also examine the sensitivity of the multiplicity of equilibria and of the core to variations in individual initial endowments. Computational results show that the core first splits into two pieces at $N = 5$ and then splits a second time into three pieces at $N = 12$. The core shrinks by $N = 600$ with essentially only the 3 competitive equilibria remaining. The authors find that the speed of convergence of the core toward the three competitive equilibria is not uniform. Initially, for small N , it is not of the order $1/N$, but when N is large, the convergence rate is approximately of the order $1/N$. Small variations in the initial individual endowments along the price rays to the competitive equilibria make the respective competitive equilibrium (CE) unique, and once a CE becomes unique, it remains so for all allocations on the price ray. Sensitivity analysis of the core reveals that in the large part of the endowment space where the competitive equilibrium is unique, the core either converges to the single CE or it splits into two segments, one of which converges to the CE and the other disappears.

La Porta, Rafael

PD October 1999. **TI** Investor Protection and Corporate Valuation. **AU** La Porta, Rafael; Lopez-de-Silanes, Florencio; Shleifer, Andrei; Vishny, Robert. **AA** La Porta, Lopez-de-Silanes and Shleifer: Harvard University and NBER. Vishny: University of Chicago and NBER. **SR** National Bureau of Economic Research Working Paper: 7403; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 28. **PR** \$5.00. **JE** G31, G32, K22. **KW** Corporate Governance. Minority Shareholders. Firm Valuation. Capital Ownership. Cash Flow.

AB We present a model of the effects of legal protection of minority shareholders and of cash flow ownership by a controlling shareholder on the valuation of firms. We then test this model using a sample of 371 large firms from 27 wealthy economies. Consistent with the model, we find evidence of higher valuation of firms in countries with better protection of minority shareholders, and weaker evidence of the benefits of higher cash flow ownership by controlling shareholders for corporate valuation.

Laffargue, Jean-Pierre

TI A Computational General Equilibrium Model with Vintage Capital. **AU** Cadiou, Loic; Dees, Stephane; Laffargue, Jean-Pierre.

TI The Wage Curve: The Lessons of an Estimation over a Panel of Countries. **AU** Guichard, Stephanie; Laffargue, Jean-Pierre.

Lambertini, Luca

PD November 1999. **TI** Minimum Quality Standards and Predatory Behaviour. **AU** Lambertini, Luca; Scarpa, Carlo. **AA** Lambertini: University of Bologna. Scarpa: University of Brescia. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 99/86; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 17. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** L12, L13. **KW** Minimum Quality Standard. Vertical Differentiation. Predatory Behavior. **AB** This paper shows that the introduction of a minimum quality standard can have repercussions on market structure, opening the possibility of predatory behavior. The predatory equilibrium exists independently of whether or not adjustment costs are present. Moreover, whenever predation is an equilibrium, it is selected by the risk dominance criterion.

Lamont, Owen A.

PD October 1999. **TI** The Diversification Discount: Cash Flows vs. Returns. **AU** Lamont, Owen A.; Polk, Christopher. **AA** Lamont: University of Chicago and NBER. Polk: Northwestern University. **SR** National Bureau of Economic Research Working Paper: 7396; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** \$5.00. **JE** G11, G12, G34. **KW** Diversification. Asset Pricing. Portfolio Choice. Cash Flows. Stock Returns.

AB Diversified firms have different values than comparable portfolios of single-segment firms. These value differences must be due to differences in either future cash flows or future returns. Expected security returns on diversified firms vary systematically with relative value. Discount firms have

significantly higher subsequent returns than premium firms. Slightly more than half of the cross-sectional variation in excess values is due to variation in expected future cash flows, with the remainder due to variation in expected future returns and to covariation between cash flow and returns.

Lanza, Alessandro

TI Richer and Cleaner? A Study on Carbon Dioxide Emissions in Developing Countries. **AU** Galeotti, Marzio; Lanza, Alessandro.

Laroque, Guy

PD September 1999. **TI** Breaking Down Married Female Non-Employment in France. **AU** Laroque, Guy; Salanie, Bernard. **AA** INSEE (Institut National de la Statistique et des Etudes Economiques). **SR** Centre for Economic Policy Research Discussion Paper: 2239; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 52. **PR** 5 pounds, \$8 or 8 euros. **JE** J20, J30, J40. **KW** Minimum Wage. Labor Supply, Female. France.

AB The purpose of this paper is to study the causes of unemployment empirically, using individual data and an approach which refines that of Meyer and Wise. Using the French 1997 Labour Survey data, we decompose non-employment of married women into three components: voluntary, classical (due to the minimum wage) and "other" (a residual category). We find that the minimum wage explains close to 15% of non-employment for these women and that the disincentive effects of some welfare policy measures may be large. Our approach also allows us to evaluate various labor and welfare policy experiments in their effects on participation and employment.

Laux, Christian

TI Internal Competition for Corporate Financial Resources. **AU** Inderst, Roman; Laux, Christian.

Laxminarayan, Ramanan

TI Socioeconomic Determinants of Disease Transmission in Cambodia. **AU** Deolalikar, Anil B.; Laxminarayan, Ramanan.

Le Van, Cuong

TI A Simple Proof of Existence of Equilibrium in a One Sector Growth Model With Bounded or Unbounded Returns From Below. **AU** Duran, Jorge; Le Van, Cuong.

Leahy, Dermot

PD October 1999. **TI** Unionisation and Foreign Direct Investment. **AU** Leahy, Dermot; Montagna, Catia. **AA** Leahy: University College Dublin. Montagna: University of Dundee. **SR** Centre for Economic Policy Research Discussion Paper: 2260; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 32. **PR** 5 pounds, \$8 or 8 euros. **JE** F16, F23. **KW** FDI. Unionization. Strategic Behavior.

AB This paper investigates the effects of different degrees of wage setting centralization on (1) the incentive of a Multinational Enterprise (MNE) to locate in a host country, (2) the optimal level of investment it decides to commit to its foreign operation, and (3) the host country's welfare. Decentralized and centralized wage bargaining are considered. The nature of product market competition between the MNE

and domestic firms affects results that cast doubt on some of the conventional wisdom on Foreign Direct Investment (FDI). In particular, the paper shows that: (i) it is not always welfare improving to attract inward FDI, and (ii) the MNE may prefer centralized to decentralized wage setting regimes.

Lee, Jon

TI Indivisibility and Divisibility Polytopes. **AU** Coppersmith, Don; Lee, Jon.

Lemke, Robert J.

PD March 2000. **TI** Child Care and the Welfare to Work Transition. **AU** Lemke, Robert J.; Witte, Ann Dryden; Queralt, Magaly; Witt, Robert. **AA** Lemke: Florida International University. Witte: Florida International University and National Bureau of Economic Research. Queralt: Wellesley Child Care Research Partnership. Witt: University of Surrey. **SR** National Bureau of Economic Research Working Paper: 7583; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 25. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** H24, I38, J22. **KW** Child Care. Welfare. Massachusetts.

AB This paper assesses the role of child care in the welfare-to-work transition using the unusually large and comprehensive data base for Massachusetts, a state that began welfare reform in 1995 under a federal waiver, for the period July 1996 through August 1997. The findings are that both the nature of the child care market and the availability of subsidized care and early education affect the probability that current and former welfare recipients will work. The cost, stability and quality of care matter in the child care market, and child care subsidies and some types of early education serve to increase employment. To be more specific, increased funding for child care subsidies and the availability of full day kindergarten significantly increase the probability that current and former welfare recipients work.

Lerner, Josh

PD March 2000. **TI** The Simple Economics of Open Source. **AU** Lerner, Josh; Tirole, Jean. **AA** Lerner: Harvard University and National Bureau of Economic Research. Tirole: Institut D'Economie Industrielle. **SR** National Bureau of Economic Research Working Paper: 7600; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 34. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** L22, L31, L86. **KW** Computer Software.

AB There has been a recent surge of interest in open source software development, which involves developers at many different locations and organizations sharing code to develop and refine programs. To an economist, the behavior of individual programmers and commercial companies engaged in open source projects is initially startling. This paper makes a preliminary exploration of the economics of open source software. We highlight the extent to which labor economics, especially the literature on "career concerns," can explain many of these projects' features. Aspects of the future of open source development process, however, remain somewhat difficult to predict with "off-the-shelf" economic models.

Lettau, Martin

TI Have Individual Stocks Become More Volatile? An Empirical Exploration of Idiosyncratic Risk. **AU** Campbell, John Y.; Lettau, Martin; Malkiel, Burton G.; Xu, Yexiao.

Levine, Paul L.

TI Delegation and the Ratchet Effect: Should Populations Be Pro- Industry? **AU** Currie, David; Levine, Paul L.; Rickman, Neil.

Levine, Phillip B.

PD March 2000. **TI** The Sexual Activity and Birth Control Use of American Teenagers. **AA** Wellesley College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7601; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 41. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** J13. **KW** Teen Pregnancy, United States. Birth Control. **AB** This paper evaluates the evidence regarding teens' sexual activity and birth control use with an emphasis on the contribution of economic analysis. For non-economists, teen sexual activity is often considered spontaneous and irrational, and pregnancies are viewed as "mistakes." Alternatively an economic framework, which focuses on the costs and benefits of alternative actions and utilizes more sophisticated statistical methods, can be applied to these "decisions" as well. After documenting recent trends, the paper reviews prior economic and non-economic research regarding the determinants of these activities. Economic models differ in that they predict unprotected sexual activity will decline if its costs, broadly defined, increase. Evidence documenting who engages in sexual activity and uses birth control and an analysis of state-level data over time marks whether changes in costs are related to changes in these behaviors. The results support the notion that costs matter. The final section reviews the evidence regarding the impact of teen child-bearing on women's subsequent well-being to examine the magnitude of its cost.

Levinson, Arik

TI Environmental Compliance Costs and Foreign Direct Investment Inflows to U.S. States. **AU** Keller, Wolfgang; Levinson, Arik.

PD December 1999. **TI** An Industry-Adjusted Index of State Environmental Compliance Costs. **AA** University of Wisconsin, Madison and NBER. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 99/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 38. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** H73, Q28. **KW** State Environmental Regulatory Stringency. Compliance Costs. Industrial Compositions.

AB This paper describes a new, industry-adjusted index of state environmental compliance costs from 1977 to 1994. The index has two principal advantages: it controls for states' industrial compositions, and it can be calculated for 17 years, thus facilitating comparisons both among states and within states over time. Several notable facts emerge. First, differences in states' industrial compositions play a large role in determining their environmental compliance costs. Second, after controlling for industrial composition, the variance across states in compliance costs declined steadily between 1977 and

1994. Third, this cost index is negatively correlated with subjective indices of state environmental efforts compiled by various environmental organizations. In sum, the cost index described here provides some new data on historical trends in state regulatory differences, differs from the conventional wisdom regarding states' relative environmental efforts, and provides a useful tool for researchers exploring the effects of compliance costs on economic activity.

Liebman, Jeffrey B.

TI The Taxation of Executive Compensation. AU Hall, Brian J.; Liebman, Jeffrey B.

Lile, Ronald

PD May 1998. TI State-Level Policies and Regulatory Guidance for Compliance in the Early Years of the SO₂ Emission Allowance Trading Program. AU Lile, Ronald; Burtraw, Dallas. AA Resources for the Future. SR Resources for the Future Discussion Paper: 98/35; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. PG 51. PR Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. JE H43, Q25, Q28, Q48. KW Clean Air Act. Sulfur Dioxide. Allowance Trading. Regulation. Electricity.

AB The Clean Air Act Amendments (CAAA) of 1990 instituted a historic experiment in emission allowance trading for sulfur dioxide (SO₂). A necessary requirement for evaluating this experiment is an understanding of how the cost recovery rules and other guidance given to firms by state-level public utility commissions (PUCs) and elected bodies has affected compliance behavior. From the onset of the CAAA, there has been varied response by state policy-makers toward SO₂ compliance. This paper presents a compilation of these actions as they took shape in states that were affected by the SO₂ program. Our primary interest is in the proposals that emerged during the embryonic years of the allowance program, from 1990 to 1993, when investment plans for utilities affected by the first phase of the program beginning in 1995 were taking shape.

PD November 1998. TI Implementing the Clean Development Mechanism: Lessons from U.S. Private-Sector Participation in Activities Implemented Jointly. AU Lile, Ronald; Powell, Mark; Toman, Michael A. AA Lile: University of Maryland. Powell: U.S. Department of Agriculture. Toman: Resources for the Future. SR Resources for the Future Discussion Paper: 99/08; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. PG 28. PR Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. JE F21, F23, Q25, Q28. KW Climate Change. Joint Implementation. Greenhouse Gases. Clean Development. Environmental Policy. AB The "Clean Development Mechanism" (CDM) contained in the December 1997 Kyoto Protocol provides the capacity for industrialized countries to claim credits for greenhouse gas (GHG) emissions reductions or offsets undertaken in cooperation with host developing countries. This paper highlights some of the lessons for establishing a successful CDM by examining a small number of cases from the United States Initiative on Joint Implementation (USJI). The authors first review the objectives, proposal review and evaluation criteria of this program, and provide some overall information on project proposals by project type and stage of development. They then develop case studies of two energy-related USJI

projects from the earlier phase of the program. These cases illustrate several potential challenges that can arise in establishing CDM transactions. Further investigation of more recent cases sheds some light on the extent to which these challenges change over time.

Lin, I-Fen

TI How Hungry is the Selfish Gene? AU Case, Anne; Lin, I-Fen; McLanahan, Sara.

Lindahl, Mikael

TI Education for Growth: Why and For Whom? AU Krueger, Alan B.; Lindahl, Mikael.

Lippi, Francesco

TI Labour Markets and Monetary Union: A Strategic Analysis. AU Cukierman, Alex; Lippi, Francesco.

Lise, Wietze

TI Technology Diffusion and the Stability of Climate Coalitions. AU Tol, Richard S. J.; Lise, Wietze; van der Zwaan, Bob.

Lizzeri, Alessandro

TI Strategic Certification and Provision of Quality. AU Albano, Gian Luigi; Lizzeri, Alessandro.

Lombardo, Davide

TI Legal Determinants of the Return on Equity. AU Pagano, Marco; Lombardo, Davide.

TI Law and Equity Markets: A Simple Model. AU Pagano, Marco; Lombardo, Davide.

Long, Rebecca J.

PD January 1999. TI The Federal Advisory Committee Act and Public Participation in Environmental Policy. AU Long, Rebecca J.; Beierle, Thomas C. AA Long: State of California Legislative Analyst's Office. Beierle: Resources for the Future. SR Resources for the Future Discussion Paper: 99/17; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. PG 49. PR Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. JE D72, D74, Q28, Q29. KW Public Participation. Federal Advisory Committee. Decision-Making. Dispute Resolution. Advisory Committees.

AB This paper discusses the Federal Advisory Committee Act (FACA) and how it affects public participation in environmental decision-making. As the primary law governing how the federal government seeks outside advice, FACA has had a profound influence on who participates in government decision-making, when they participate, how they participate, and what influence participation has on policy. FACA has been quite successful in limiting the unbalanced influence of special interests, acting through advisory committees, on public policy-making. However, FACA has also created a number of "chilling effects" on public participation in environmental decision-making. The paper examines how these chilling effects have affected participation at the five federal agencies with environmental management responsibilities. The paper concludes by recommending a streamlining of FACA's procedural requirements, a clarification of regulations and policies regarding what type of participation falls under FACA,

and an elimination of administrative ceilings on advisory committee formation.

Loparic, Marko

PD September 2000. **TI** Dynamic Knapsack Sets and Capacitated Lot-Sizing. **AU** Loparic, Marko; Marchand, Hugues; Wolsey, Laurence A. **AA** Loparic: CORE. Marchand: London School of Economics. Wolsey: CORE and INMA, Belgium. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/47; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 10. **PR** \$100 per year. **JE** C61, D24. **KW** Knapsack Sets. Valid Inequalities. Simultaneous Lifting. Capacitated Lot-Sizing. Wagner-Whitin Costs.

AB A dynamic knapsack set is a natural generalization of the 0-1 knapsack set with a continuous variable studied recently. For dynamic knapsack sets a large family of facet-defining inequalities, called dynamic knapsack inequalities, are derived by fixing variables to one and then lifting. Such inequalities have the simultaneous lifting property, and for small instances provide a significant proportion of all the facet-defining inequalities. The authors then consider single-item capacitated lot-sizing problems, and propose the joint study of three related sets. The first models the discrete lot-sizing problem, the second the continuous lot-sizing problem with Wagner-Whitin costs, and the third the continuous lot-sizing problem with arbitrary costs. The first set that arises is precisely a dynamic knapsack set, the second an intersection of dynamic knapsack sets, and the unrestricted problem can be viewed as both a relaxation and a restriction of the second. It follows that the dynamic knapsack inequalities and their generalizations provide strong valid inequalities for all three sets. Some limited computation results are reported as an initial test of the effectiveness of these inequalities on capacitated lot-sizing problems.

Lopez-de-Silanes, Florencio

TI Investor Protection and Corporate Valuation. **AU** La Porta, Rafael; Lopez-de-Silanes, Florencio; Shleifer, Andrei; Vishny, Robert.

Loustalan, Catherine

TI Domestic Competition and Export Performance of Manufacturing Firms in Cote d'Ivoire. **AU** Azam, Jean-Paul; Calmette, Marie-Francoise; Loustalan, Catherine; Maurel, Christine.

TI Domestic Competition and Export Performance of Manufacturing Firms in Cote d'Ivoire. **AU** Azam, Jean-Paul; Calmette, Marie-Francoise; Loustalan, Catherine; Maurel, Christine.

Lovo, Stefano

PD April 2000. **TI** Infinitely Lived Representative Agent Exchange Economy with Myopia. **AA** Universite de Sciences Sociales de Toulouse and CORE. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/28; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 23. **PR** \$100 per year. **JE** D51, D91, E21.

KW Myopia. General Equilibrium. Exchange Economies. Infinitely Lived. Consumption.

AB We consider a family of infinitely long-lived representative agent economies where, each period, agents can only decide on a consumption plan of finite dimension. It is shown that myopia generates indeterminacy and monetary equilibrium in infinitely lived representative economies. Any invertible dynamics with at most one monetary steady state that is increasing in the quantity of money can represent the set of equilibria of an appropriate myopic economy.

TI A Comparison of Standard Multi-Unit Auctions with Synergies. **AU** Albano, Gian Luigi; Germano, Fabrizio; Lovo, Stefano.

Lowe, Adam I.

TI Environmental Implications of the Health Care Service Sector. **AU** Davies, Terry; Lowe, Adam I.

Lown, Cara S.

TI The Information in the High Yield Bond Spread for the Business Cycle: Evidence and Some Implications. **AU** Gertler, Mark; Lown, Cara S.

Lubrano, Michel

PD August 2000. **TI** Bayesian Non-Linear Modellings of the Short Term US Interest Rate: The Help of Non-Parametric Tools. **AA** GREQAM-CNRS and CORE. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/38; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 23. **PR** \$100 per year. **JE** C11, C14, C22, C52, E43. **KW** Bayesian Analysis. Time Series. Nonparametric Methods. Model Evaluation. Interest Rates.

AB This paper is concerned with the empirical investigation of models of the US short-term interest rate, using a mixture of classical nonparametric methods and of Bayesian parametric methods. The shape of the drift and volatility functions of the usual diffusion equation are first investigated using a preliminary nonparametric analysis. The paper then develops a Bayesian method for comparing models which is based on the ability of a model to minimize the Hellinger distance between the posterior predictive density and the density of the observed sample. A discretization of the usual diffusion equation is estimated with different parameterizations which range from variants of the constant elasticity of variance model to various switching models which draw their justifications from the preliminary nonparametric analysis. The paper concludes with some implications for the term structure. It appears that a model good at reproducing the data density is not necessarily the best for simulating the yield curve.

Luce, Thomas

TI Local Revenue Hills: A General Equilibrium Specification with Evidence from Four U.S. Cities. **AU** Haughwout, Andrew; Inman, Robert; Craig, Steven; Luce, Thomas.

Lucifora, Claudio

TI The Returns to Education in Italy: A New Look at the Evidence. **AU** Brunello, Giorgio; Comi, Simona; Lucifora, Claudio.

Lueth, Erik

PD August 2001. **TI** Can Inheritances Alleviate the Demographic Burden? **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/97; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 25. **PR** \$10.00. **JE** D58, E62, H55. **KW** Bequests. Taxation. Computable General Equilibrium Model.

AB With pay-as-you-go schemes in place, population aging will impose a heavy fiscal burden on young and future cohorts. However these cohorts may also profit from larger inheritances as the number of heir declines. The aim of this paper is to explore the compensating potential of private intergenerational transfers. A dynamic, computable general equilibrium model is employed allowing for a pay-as-you-go scheme, various bequest motives, and an endogenous labor supply. The findings are twofold. First, the increase in future generations' inheritances is insufficient to make up for the demographic burden. Second, increasing the inheritance tax during the demographic transition may alleviate the fiscal burden of future generations by improving overall efficiency.

Macauley, Molly K.

TI Estimating Future Consumer Welfare Gains from Innovation: The Case of Digital Data Storage. **AU** Austin, David; Macauley, Molly K.

PD March 2000. **TI** Can Power From Space Compete? **AU** Macauley, Molly K.; Darmstadter, Joel; Fini, John N.; Greenberg, Joel S.; Maulbetsch, John S.; Schaal, A. Michael; Styles, Geoffrey S. W.; Vedda, James A. **AA** Macauley and Darmstadter: Resources for the Future. Fini: Strategic Insight, Inc. Greenberg: Princeton Synergetics, Inc. Maulbetsch: Energy Power Research Institute. Schaal: Energy Ventures Analysis, Inc. Styles: Texaco, Inc. **SR** Resources for the Future Discussion Paper: 00/16; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 40. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** O32, O38, Q41, Q42, Q48. **KW** Energy. Solar Power. Space. Satellites. Electricity.

AB Satellite solar power (SSP) has been suggested as an alternative to terrestrial energy resources for electricity generation. In this study, we consider the market for electricity from the present to 2020, roughly the year when many experts expect SSP to be technically achievable. We identify several key challenges for SSP in competing with conventional electricity generation in developed and developing countries, discuss the role of market and economic analysis as technical development of SSP continues during the coming years, and suggest future research directions to improve understanding of the potential economic viability of SSP.

PD May 1998. **TI** Enforcing Environmental Regulation: Implications of Remote Sensing Technology. **AU** Macauley, Molly K.; Brennan, Timothy J. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/33; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 45. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** Q28. **KW** Environmental Regulation. New Technologies. Remote Sensing.

AB We review economic models of environmental protection and regulatory enforcement to highlight several attributes that are particularly likely to benefit from new enforcement

technologies such as remote sensing using satellites in space. These attributes include the quantity and quality of information supplied by the new technologies; the accessibility of the information to regulators, regulatees, and third parties; the cost of the information; and whether the process of information collection can be concealed from the observer. Satellite remote sensing is likely to influence all of these attributes and, in general, improve the efficacy of enforcement.

Maccheroni, Fabio

TI Expected Utility Theory without the Completeness Axiom. **AU** Dubra, Juan; Maccheroni, Fabio; Ok, Efe A.

Macey, Jonathon R.

TI Objectivity, Proximity and Adaptability in Corporate Governance. **AU** Boot, Arnoud W. A.; Macey, Jonathon R.

MacFarlan, Maitland

PD June 2001. **TI** The Macroeconomic Impact of HIV/AIDS in Botswana. **AU** MacFarlan, Maitland; Sgherri, Silvia. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/80; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 31. **PR** \$10.00. **JE** J11, O41, O55. **KW** Social Policy. Health Care. Botswana. HIV/AIDS.

AB This paper provides an overview of the potential macroeconomic effects of HIV/AIDS in Botswana, focusing on the key channels through which the pandemic is likely to affect the economic outlook and on the uncertainties involved. To estimate the impact of HIV/AIDS, a dual- economy equilibrium model is constructed and simulated under different scenarios. Depending on exactly how AIDS affects the outlook, GDP growth is projected to fall from around 5 1/2 percent a year without the pandemic to between 1 1/2 and 2 1/2 percent a year with AIDS. Non- negligible redistribution effects across sectors and labor skill categories are also likely to arise. Finally, the paper draws attention to the potential effects of HIV/AIDS on the long-term fiscal position of Botswana, highlighting the need for increased international support and/or lower drug prices so that the widespread introduction of anti- retroviral drug treatment is feasible.

MacKinnon, James G.

TI Artificial Regressions. **AU** Davidson, Russell; MacKinnon, James G.

Magris, Francesco

TI Sunspot Equilibria in a Monetary Economy with Capital Accumulation. **AU** Bloise, Gaetano; Magris, Francesco.

Maharaj, Elizabeth Ann

PD March 2001. **TI** Comparison of Non-Stationary Time Series in the Frequency Domain. **AA** Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Paper: 01/01; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/. **PG** 18. **PR** no charge. **JE** C12, C14, C15. **KW** Evolutionary Spectra. Lag Window. Time Window. Randomization Tests.

AB In this paper we compare two non-stationary time series using non- parametric procedures. Evolutionary spectra are

estimated for the two series. Randomization tests are performed on groups of spectral estimates for both related and independent time series. Simulation studies show that in certain cases the tests perform reasonably well. The tests are applied to observed geological and financial time series.

PD September 1999. **TI** A Test for the Difference Parameter of the ARFIMA Model Using the Moving Blocks Bootstrap. **AA** Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Paper: 99/11; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/. **PG** 18. **PR** no charge. **JE** C12, C13, C14, C15. **KW** Long Memory. Periodogram Regression. Smoothed Periodogram Regression. Block Size.

AB In this paper we construct a test for the difference parameter d in the fractionally integrated autoregressive moving-average (ARFIMA) model. Obtaining estimates by smoothed spectral regression estimation method, we use the moving blocks bootstrap method to construct the test for d . The results of Monte Carlo studies show that this test is generally valid for certain block sizes, and for these block sizes, the test has reasonably good power.

Majnoni, Giovanni

TI Stress Testing of Financial Systems: An Overview of Issues, Methodologies, and FSAP Experiences. **AU** Blaschke, Winfrid; Jones, Matthew T.; Majnoni, Giovanni; Peria, Soledad Martinez.

TI Stress Testing of Financial Systems: An Overview of Issues, Methodologies, and FSAP Experiences. **AU** Blaschke, Winfrid; Jones, Matthew T.; Majnoni, Giovanni; Peria, Soledad Martinez.

Malkiel, Burton G.

TI Have Individual Stocks Become More Volatile? An Empirical Exploration of Idiosyncratic Risk. **AU** Campbell, John Y.; Lettau, Martin; Malkiel, Burton G.; Xu, Yexiao.

Manasse, Paolo

PD October 1999. **TI** Trade, Wages, and Superstars. **AU** Manasse, Paolo; Turrini, Alessandro **AA** Manasse: Universita Statale di Milano. Turrini: Universita degli Studi di Bergamo, CEPR and Centro Studi Luca d'Agliano. **SR** Centre for Economic Policy Research Discussion Paper: 2262; CEPR, 90- 98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** F12, F16, J31. **KW** International Trade. Wage Inequality. Technological Change.

AB What is the effect of "globalization" on wage inequality? The model "global" economy resembles Rosen's (1981) "Superstars" economy, where a) innovations in production and communication technologies enable suppliers to reach a larger mass of consumers and to improve the (perceived) quality of their products and b) trade barriers fall. When transport costs fall, income is redistributed away from the non-exporting to the exporting sector of the economy. As the former turns out to employ workers of higher skill and pay, the effect is to raise wage inequality. Whether the least skilled stand to lose or gain from improved production or communication technologies, in contrast, depends on whether technology is skill-complementary, or a substitute. The model gives an intuitive

explanation for the empirical regularities that skill intensity, market size and wages tend to be positively associated with exporting activity across sectors and plants.

Mandelbrot, Benoit B.

TI Multifractal Products of Cylindrical Pulses. **AU** Barral, Julien; Mandelbrot, Benoit B.

Mansour, Malek J.

TI Sector Sensitivity to Exchange Rate Fluctuations. **AU** Fouquin, Michel; Sekkat, Khalid; Mansour, Malek J.; Mulder, Nanno; Nayman, Laurence.

Mansur, Erin

TI The Effects of Trading and Banking in the SO2 Allowance Market. **AU** Burtraw, Dallas; Mansur, Erin.

Marceau, Nicolas

TI Inter-Jurisdictional Competition for Firms: Jobs as Vehicles for Redistribution. **AU** Boadway, Robin; Cuff, Katherine; Marceau, Nicolas.

Marchand, Hugues

TI Dynamic Knapsack Sets and Capacitated Lot-Sizing. **AU** Loparic, Marko; Marchand, Hugues; Wolsey, Laurence A.

Marchand, Maurice

TI Optimal Income Taxation with Quasi-Linear Preferences Revisited. **AU** Boadway, Robin; Cuff, Katherine; Marchand, Maurice.

Marin, Dalia

PD September 1999. **TI** Disorganization and Financial Collapse. **AU** Marin, Dalia; Schnitzer, Monika. **AA** University of Munich. **SR** Centre for Economic Policy Research Discussion Paper: 2245; CEPR, 90- 98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** D20, G30, O10, P30. **KW** Transition. Financial Crisis. Output Fall. Credit Constraint. Barter. Hold-Up.

AB Recently, Blanchard and Kremer (BK) argued that disorganization has led to the output decline in the former Soviet Union. This paper introduces liquidity and credit constraints into the BK model and shows how these problems can alleviate the hold-up problem. Arguing further, barter creates a hostage to deal with disorganization when credit enforcement is prohibitively costly. The theory helps to explain how the three observed phenomena of output decline, inter-firm arrears and barter in transition economies are connected. Based on a survey of 165 barter deals in the Ukraine in 1997, the BK result is reproduced with firm level and deal-specific data and shows that, in addition to the input shortage, the financial shortage and barter have each an important effect on output growth.

Marion, Nancy P.

TI Uncertainty and the Disappearance of International Credit. **AU** Aizenman, Joshua; Marion, Nancy P.

Marsiliani, Laura

PD January 2000. **TI** Imperfect Competition, Labour

Market Distortions, and the Double Dividend Hypothesis. AU Marsiliani, Laura; Renstrom, Thomas I. AA Marsiliani: Tilburg University and CentER for Economic Research. Renstrom: CentER for Economic Research, Tilburg. SR Fondazione Eni Enrico Mattei Note di Lavoro: 00/11; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 49. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE E62, H23, H31, H32. KW Double Dividend. Environmental Tax. Tax Reform. Imperfect Competition. Welfare.

AB The paper explores the hypothesis of a double dividend from environmental taxation i.e. whether shifting the burden of taxation away from labor toward the environment can boost employment and increase welfare. We present a general-equilibrium model where the economy is distorted by labor taxes, monopolistic product-market competition, and union-wage bargaining. We find that employment and welfare always increase when the revenue from the introduction of a Pigouvian tax (imposed on firms and households) is fully recycled to cut the rate of the pre-existing labor tax. Moreover, it turns out that the degree of the imperfections influences the magnitude of the effects of the reform. We also offer numerical results for the case in which the pollution tax is positive at the outset.

Martin, Gael M.

PD July 2000. TI Implicit Bayesian Inference Using Option Prices. AU Martin, Gael M.; Forbes, Catherine S.; Martin, Vance L. AA Martin, G. and Forbes: Monash University. Martin, V.: Melbourne University. SR Monash Department of Econometrics and Business Statistics Working Paper: 00/05; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/. PG 35. PR no charge. JE C11, G13. KW Bayesian Inference. Option Pricing. Option Price Prediction. Hedging Errors. Nonnormal Returns. GARCH. Bayesian Averaging.

AB A Bayesian approach to option pricing is presented, in which posterior inference about the underlying returns process is conducted implicitly, via observed option prices. A range of models which allow for conditional leptokurtosis, skewness and time-varying volatility in returns, are considered, with posterior parameter distributions and model probabilities backed out from the option prices. Predictive and hedging densities associated with the different models are produced. Models are ranked according to several criteria, including their ability to fit observed option prices, predict future option prices and minimize hedging errors. In addition to model-specific results, averaged predictive and hedging densities are produced, the weights used in the averaging process being the posterior model probabilities. The method is applied to option price data on the S&P500 stock index. Whilst the results provide some support for the Black-Scholes model, no one model dominates according to all criteria considered.

Martin, Philippe

PD September 1999. TI Financial Super-Markets: Size Matters for Asset Trade. AU Martin, Philippe; Rey, Helene. AA Martin: GIIIS (Graduate Institute of International Studies). Rey: London School of Economics. SR Centre for Economic Policy Research Discussion Paper: 2232; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 32. PR 5 pounds, \$8 or 8

euros. JE F12, F40, G12. KW International Macroeconomics. Asset Trade. Transaction Costs. Incomplete Markets.

AB The paper presents a two-country macroeconomic model in which the number of financial assets is endogenous. Imperfect substitutability of assets and international transaction costs give a comparative advantage to large markets, because of demand effects. Agents have more incentives to undertake risky investments on those markets; they can also diversify risk at a lower cost. Prices of financial assets are higher in the large area because asset markets are broader. We also analyze the impact of domestic transaction costs and issuing costs on financial markets and returns. Our theory has important implications for the pattern of international trade in risky assets.

Martin, Vance L.

TI Implicit Bayesian Inference Using Option Prices. AU Martin, Gael M.; Forbes, Catherine S.; Martin, Vance L.

Martinez, Salvador A.

TI The Determinants of Household Recycling: A Material Specific Analysis of Unit Pricing and Recycling Program Attributes. AU Jenkins, Robin R.; Martinez, Salvador A.; Palmer, Karen; Podolsky, Michael J.

Masters, William A.

TI Climate and Scale in Economic Growth. AU McMillan, Margaret S.; Masters, William A.

TI Africa's Growth Trap: A Political-Economy Model of Taxation, R&D and Investment. AU McMillan, Margaret S.; Masters, William A.

Matsa, David

TI How do Retailers Adjust Prices: Evidence From Store-Level Data. AU Hosken, Daniel; Matsa, David; Reiffen, David.

Matsuyama, Kiminori

PD April 2000. TI The Rise of Mass Consumption Societies. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1289; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 43. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE O11, O14, O15, O20, O33. KW Income Distribution. Mass Consumption. Technological Change. Domino Effect. Development.

AB This paper develops a model to understand mechanisms behind the rise of mass consumption societies. The development process depicted in the model follows the Flying Geese pattern, in which a series of industries takes off one after another. As productivity improves in these industries, each consumer good becomes affordable to an increasingly larger number of households, which constantly expand the range of goods they consume. This in turn generates larger markets for consumer goods, which leads to further improvement in productivity. In order for such two-way causality to generate

virtuous cycles of productivity gains and expanding markets, income distribution should be neither too equal nor too unequal. Some income inequality is needed for the economy to take off; too much equality means that the economy stagnates in a poverty trap. With too much inequality, the economy's development stops prematurely. The rise of a mass consumption society is thus an essential element for sustainable development.

PD July 2000. **TI** Financial Market Globalization and Endogenous Inequality of Nations. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1300; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 38. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** E44, F20, F43, G15, O11. **KW** Imperfect Credit Markets. Borrowing Constraints. Convergence. International Finance. Poverty Traps.

AB This paper analyzes the effects of financial market globalization on the cross-country pattern of development in the world economy. To this end, it develops a dynamic macroeconomic model of imperfect credit markets, in which investment becomes borrowing-constrained at the lower stage of development. In the absence of the international financial market, the world economy converges to the symmetric steady state, and the cross-country difference disappears in the long run. In the presence of the international financial market, the symmetric steady state could lose its stability, in which case the cross-country distribution of the capital stock is concentrated into two mass points in every stable steady state. The symmetry-breaking caused by unrestricted flows of financial capital leads to a polarization of the world economy into the rich and the poor. The model thus demonstrates the possibility that financial market globalization may cause, or at least magnify, inequality of nations, and the international financial market is a mechanism through which some countries become rich at the expense of others. The model suggests that the poor countries cannot jointly escape from the poverty trap by merely cutting their links to rich countries.

PD January 1999. **TI** Geography of the World Economy. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1239; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 30. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** F12, F15, O11, O18, R12. **KW** Economic Integration. Uneven Development. Economic Geography. Locational Advantages. Proximity Matrix.

AB This paper presents a theoretical framework to study the effects of geographical factors on the distribution of industries in the world economy, which consists of many regions. The geographical feature of each region is summarized by a proximity matrix, whose elements measure the closeness between every pair of regions, and depend on the parameters representing the transport and other costs of using a variety of trade routes. The main objective is to show how a change in

these costs of trade affects the distribution of industries, by amplifying the geographical advantages and disadvantages held by different regions. The results are used not only to examine the effects of an improvement in transport infrastructure, but also to discuss some problems from economic history (mostly Japanese and European), regional economic integration, the north-south division, and others.

PD December 1999. **TI** Growing Through Cycles in an Infinitely-Lived Agent Economy. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1280; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 16. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** E32, O41. **KW** Endogenous Growth. Business Fluctuations. Asynchronous Movements. Innovation. Investment.

AB This paper develops an infinitely-lived representative agent economy, in which the relative contribution of the two engines of growth, investment and innovation, changes endogenously over time. The balanced growth path of the economy loses its stability when its endogenously determined growth rate is not sufficiently high, and the economy fluctuates, perpetually moving back and forth between two phases. In one phase, there is no innovation and the market structure is competitive, and the economy grows solely by capital accumulation, as in a neoclassical model. In the other phase, new goods are introduced and the market structure is monopolistic, as in a neo-Schumpeterian model. In the long run, both investment and innovation grow at the same rate, but the economy alternates between the periods of high investment and the periods of high innovation.

Maurel, Mathilde

PD October 1999. **TI** Barter in Russia: Liquidity Shortage Versus Lack of Restructuring. **AU** Maurel, Mathilde; Brana, Sophie. **AA** Maurel: Universite de Paris I. Brana: Universite Montesquieu-Bordeaux IV. **SR** Centre for Economic Policy Research Discussion Paper: 2258; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 32. **PR** 5 pounds, \$8 or 8 euros. **JE** C22, C23, E50, P20. **KW** Barter. Non-Monetary Transactions. Virtual Economy. Russia. Transition Economies. **AB** Barter in Russia can be explained by firms' liquidity constraint: it is strongly correlated with financial tightness. However, a microeconomic analysis reveals that the rationale behind this liquidity constraint is different according to the firm situation. For firms in a good economic situation, but faced with adverse selection problems and having no access to bank credit, barter acts as a substitute for short-term credit. While for indebted firms, barter, in the same way as external finance, is a way of avoiding costly restructuring.

Mayer, Colin

TI Finance, Investment and Growth. **AU** Carlin, Wendy; Mayer, Colin.

TI Finance, Investment and Growth. **AU** Carlin, Wendy; Mayer, Colin.

Mayer, Thierry

TI Effet frontiere, integration economique et "Forteresse Europe" (Border Effect, Economic Integration and Fortress Europe). **AU** Head, Keith; Mayer, Thierry.

Mazurek, Janice

TI The Cost of Developing Site-Specific Environmental Regulations: Evidence from EPA's Project XL. **AU** Blackman, Allen; Mazurek, Janice.

McCallum, Bennett T.

PD October 1999. **TI** Theoretical Issues Pertaining to Monetary Unions. **AA** Carnegie Mellon University and NBER. **SR** National Bureau of Economic Research Working Paper: 7393; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** \$5.00. **JE** E42, E52, E63, F31, F33. **KW** Monetary Unions. Optimal Currency Areas. Currency Crises. Fixed Exchange Rates. Price Level.

AB The optimal currency area (OCA) concept is central to the economic analysis of monetary unions, as it clearly identifies the relevant optimizing tradeoff. Empirical work has verified the importance of various features of economies that make them strong or weak candidates for a common currency arrangement, but existing studies do not permit actual quantification of costs and benefits. Thus the OCA concept remains less than fully operational. A second relevant body of theory is that pertaining to currency crises. Formal models clarify various points concerning speculative attacks on fixed exchange rates, and show how abrupt reserve losses and depreciations can occur rationally at times when no major shocks are hitting the system. These models support the notion that a fixed (but adjustable) exchange-rate regime is not a viable option for most nations, given high mobility of financial capital. Also discussed is the recently-developed fiscal theory of price level determination, which if valid would have major implications for monetary-fiscal arrangements in currency unions. This theory contends that the price level roughly mimics the pattern of the government bond stock rather than base money when their paths differ drastically.

PD October 1999. **TI** Analysis of the Monetary Transmission Mechanism: Methodological Issues. **AA** Carnegie Mellon University and NBER. **SR** National Bureau of Economic Research Working Paper: 7395; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 34. **PR** \$5.00. **JE** C32, C52, E31, E51, E52. **KW** Monetary Policy. Transmission Mechanisms. Structural Models. Open Economy. Model Specification.

AB This paper argues that, in studying the monetary policy transmission process, more emphasis should be given to the systematic portion of policy behavior and correspondingly less to random shocks -- basically because shocks account for a very small fraction of policy-instrument variability. Analysis of the effects of the systematic part of policy requires structural modeling, rather than VAR procedures, because the latter do not give rise to behavioral relationships that can plausibly be regarded as policy-invariant. By use of an illustrative open-economy structural model based on optimizing analysis, and considering variants, the paper characterizes the effects of policy parameter settings by means of impulse response functions and root-mean-square statistics for target errors. Different models give different answers to questions about the

effects of systematic policy, so procedures for scrutinizing model specification are essential. In this regard, it is argued that vector autocorrelation functions, augmented by variance statistics for each of a model's variables, seem more promising than impulse response functions because the latter require shock identification, which is inherently a difficult process.

McCarthy, F. Desmond

PD February 2000. **TI** The Growth Costs of Malaria. **AU** McCarthy, F. Desmond; Wolf, Holger; Wu, Yi. **AA** McCarthy: World Bank. Wolf: Georgetown University and National Bureau of Economic Research. Wu: Georgetown University. **SR** National Bureau of Economic Research Working Paper: 7541; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 24. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** F43, I10, O10. **KW** Malaria. Health Costs. Economic Growth Rate. Africa.

AB Malaria ranks among the foremost health issues facing tropical countries. In this paper, we explore the determinants of cross-country differences in malaria morbidity, and examine the linkage between malaria and economic growth. Using a classification rule analysis, we confirm the dominant role of climate in accounting for cross-country differences in malaria morbidity. The data, however, do not suggest that tropical location is destiny: controlling for climate, we find that access to rural healthcare and income equality influence malaria morbidity. In a cross-section growth framework, we find a significant negative association between higher malaria morbidity and the growth rate of GDP per capita which is robust to a number of modifications, including controlling for reverse causation. The estimated absolute growth impact of malaria differs sharply across countries; it exceeds a quarter percent per annum in a quarter of the sample countries. Most of these are located in Sub-Saharan Africa (with an estimated average annual growth reduction of 0.55 percent).

McClellan, Mark B.

TI How Liability Law Affects Medical Productivity. **AU** Kessler, Daniel P.; McClellan, Mark B.

TI Medical Liability, Managed Care, and Defensive Medicine. **AU** Kessler, Daniel P.; McClellan, Mark B.

McConnell, Virginia D.

TI Cost-Effective NOx Control in the Eastern United States. **AU** Krupnick, Alan; McConnell, Virginia D.

TI The Chesapeake Bay and the Control of Nox Emissions: A Policy Analysis. **AU** Krupnick, Alan; McConnell, Virginia D.; Austin, David; Cannon, Matt; Stoessell, Terrell; Morton, Brian.

TI Coase and Car Repair: Who Should Be Responsible for Emissions of Vehicles in Use? **AU** Harrington, Winston; McConnell, Virginia D.

TI The Enhanced I/M Program in Arizona: Costs, Effectiveness, and a Comparison with Pre-Regulatory Estimates. **AU** Harrington, Winston; McConnell, Virginia D.; Ando, Amy.

TI Costs, Emissions Reductions, and Vehicle Repair: Evidence from Arizona. **AU** Ando, Amy; McConnell, Virginia D.; Harrington, Winston.

McGarry, Kathleen

PD March 2000. **TI** Testing Parental Altruism: Implications of a Dynamic Model. **AA** University of California, Los Angeles and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7593; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 19. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** D31. **KW** Inter Vivos Transfers. Altruism.

AB Each year parents transfer a great deal of money to their adult children. While intuition might suggest that these transfers are altruistic and made out of concern for the well-being of the children, the fundamental prediction of the altruistic model has been decisively rejected in empirical tests. This paper shows that, in fact, the prediction that an increase of one dollar in the income of the recipient, accompanied by a decrease of one dollar in the income of the donor, leads to a one dollar reduction in transfers will not hold, if parents use observations on the current incomes of children to update their expectations about future incomes. This result implies that many past studies have relied on too restrictive a test, and furthermore, that our ability to distinguish empirically between altruistic and exchange behavior is severely limited. The paper also analyzes the variation in transfer behavior over time and finds substantial change across periods in reciprocity status as well as strong correlation between inter vivos transfers and the transitory income of the recipient. This evidence suggests that dynamic models can provide insights into transfer behavior that are impossible to obtain in a static context.

McLanahan, Sara

TI How Hungry is the Selfish Gene? **AU** Case, Anne; Lin, I-Fen; McLanahan, Sara.

McLaren, Keith

TI Estimating Demand With Varied Levels of Aggregation. **AU** Grose, Simone; McLaren, Keith.

TI An EM Algorithm for Modelling Variably-Aggregated Demand. **AU** Grose, Simone; McLaren, Keith.

McLean, Alan

PD June 2001. **TI** On the Nature and Role of Hypothesis Tests. **AA** Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Paper: 01/04; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/. **PG** 22. **PR** no charge. **JE** B41, C12. **KW** Hypothesis Test. Significance. P Value. Probability Model. Statistical Model. Prediction.

AB Hypothesis testing is widely regarded as an essential part of statistics, but its use in research has led to considerable controversy in a number of disciplines, especially psychology, with a number of commentators suggesting it should not be used at all. A root cause of this controversy was the overenthusiastic adoption of hypothesis testing, based on a greatly exaggerated view of its role in research. A second cause was confusion between the two forms of hypothesis testing developed by Fisher on the one hand and Neyman and Pearson on the other. This paper discusses these two causes, and also proposes that there is a more general misunderstanding of the role of hypothesis testing. This misunderstanding is reflected in

vocabulary such as the true value of the parameter.

McMillan, Margaret S.

PD 2000. **TI** Climate and Scale in Economic Growth. **AU** McMillan, Margaret S.; Masters, William A. **AA** McMillan: Purdue University and Harvard University. Masters: Tufts University. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/13; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csaе.ox.ac.uk/. **PG** 31. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** F43, O47. **KW** Growth Accounting. Empirical Growth Models. Endogenous Growth.

AB This paper introduces new data on climatic conditions to empirical tests of growth theories. We find that, since 1960, temperate countries have converged towards high levels of income while tropical nations have converged towards various income levels associated with economic scale and the extent of the market. These results hold for a wide range of tests. A plausible explanation is that temperate regions' growth was assisted by their climate, perhaps historically for their transition out of agriculture into sectors whose productivity converges across countries, while tropical countries' growth is relatively more dependent on gains from specialization and trade.

PD 2000. **TI** Africa's Growth Trap: A Political-Economy Model of Taxation, R&D and Investment. **AU** McMillan, Margaret S.; Masters, William A. **AA** McMillan: Tufts University. Masters: Purdue University and Harvard University. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/14; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csaе.ox.ac.uk/. **PG** 35. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** F43, O41. **KW** Time Consistency. Agricultural Policy. Tax Regimes and Growth.

AB Why do so many African governments consistently impose high tax rates and make little investment in productive public goods when alternative policies could yield greater tax revenues and higher national income? We posit and test an intertemporal political economy model in which the government sets tax and R&D levels while investors respond with production. Equilibrium policy and growth rates depend on initial cost structure. We find that in many (but not all) African countries, low tax/high investment regimes would be time-inconsistent. For pro-growth policies to become sustainable, commitment mechanisms or new production techniques would be needed.

McVeigh, James

PD March 1999. **TI** Winner, Loser, or Innocent Victim? Has Renewable Energy Performed as Expected? **AU** McVeigh, James; Burtraw, Dallas; Darmstadter, Joel; Palmer, Karen. **AA** McVeigh: Indiana University. Burtraw, Darmstadter, and Palmer: Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/28; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 35. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** L94, Q42, Q48. **KW** Renewable Energy. Regulation. Electricity Generation. Energy Cost. Market Penetration.

AB This study provides an evaluation of the performance of five renewable energy technologies used to generate electricity:

biomass, geothermal, solar photovoltaics, solar thermal, and wind. The authors compared the actual performance of these technologies against stated projections that helped shape public policy goals over the last three decades. Their findings document a significant difference between the success of renewable technologies in penetrating the U.S. electricity generation market and in meeting cost-related goals, when compared with historic projections. In general, renewable technologies have failed to meet expectations with respect to market penetration. They have succeeded, however, in meeting or exceeding expectations with respect to their cost. To a significant degree, the difference in performance in meeting projections of penetration and cost stem from the declining price of conventional generation, which constitutes a moving baseline against which renewable technologies have had to compete.

Meara, Ellen

TI The Technology of Birth: Is it Worth It? **AU** Cutler, David M.; Meara, Ellen.

Mehay, Stephen L.

PD October 1999. **TI** The Effectiveness of Workplace Drug Prevention Policies: Does 'Zero Tolerance' Work? **AU** Mehay, Stephen L.; Pacula, Rosalie Liccardo. **AA** Mehay: Naval Postgraduate School. Pacula: RAND and NBER. **SR** National Bureau of Economic Research Working Paper: 7383; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 21. **PR** \$5.00. **JE** I18, J28. **KW** Drug Testing. Deterrence. Zero Tolerance. Military. Detection.

AB Workplace drug testing programs are becoming increasingly more common although there is little research demonstrating that they have any effect on drug use by employees. This paper analyzes the deterrence effect of a particularly aggressive workplace drug-testing policy implemented by the military in 1981. The military's policy incorporates random drug testing of current employees and zero tolerance. Using data from various years of the Department of Defense's Worldwide Survey of Health Related Behaviors and the NHSDA, we find illicit drug prevalence rates among military personnel are significantly lower than civilian rates in years after the implementation of the program but not before, suggesting a sizeable deterrence effect. These basic findings are replicated with data from the NLSY. The NLSY are also used to explore sensitivity of the deterrence effect to the probability of detection and severity of punishment, which varied across military branches during the first few years of the program's implementation.

Merlo, Antonio

TI A Structural Model of Government Formation. **AU** Diermeier, Daniel; Merlo, Antonio.

Metcalf, Gilbert E.

TI Behavioral and Distributional Effects of Environmental Policy: Introduction. **AU** Carraro, Carlo; Metcalf, Gilbert E.

Mihov, Ilian

TI Government Size and Automatic Stabilizers: International and Intranational Evidence. **AU** Fatas, Antonio; Mihov, Ilian.

Milizia, Paola

PD April 2000. **TI** Juridical Framework of Voluntary Agreements in Italy and Policy Relevance at the Local Level. **AU** Milizia, Paola; Tamborra, Marialuisa. **AA** Fondazione Eni Enrico Mattei. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/19; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 19. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** K23, K32, L51, Q25, Q28, Q29, R52. **KW** Voluntary Agreements. Environmental Regulation. Administrative Law. Administrative Simplification. Negotiation. Command and Control.

AB This paper investigates the possibility to adapt the existing Italian legal system to voluntary agreements in the environmental field. The paper consists of two parts: -- a valuation of the public administration system and a comparison of relevant laws; -- the results of an empirical study of voluntary agreements signed by local and regional administrations with the private sector. The empirical part relies on a survey carried out by FEEM, that assesses a number of agreements based on the check-list suggested by the European Commission in its Communication (COM(96) 561 final, 27/11/96). In Italy there is no univocal definition of "voluntary agreements" and no legal framework for regulating them, although both Ronchi Decree No. 22/97 on waste and the Legislative Decree No. 152/99 on water protection encourage their use. However, it is now recognized by those public administrations and private parties having experience in co-operating together that a more formal structure is needed to enhance their transparency and effectiveness as policy instruments.

Miller, Andrew J.

PD August 2000. **TI** Solving Multi-Item Capacitated Lot-Sizing Problems with Setup Times by Branch-and-Cut. **AU** Miller, Andrew J.; Nemhauser, George L.; Savelsbergh, Martin W. P. **AA** Miller: CORE. Nemhauser and Savelsbergh: Georgia Institute of Technology. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/39; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 29. **PR** \$100 per year. **JE** C61, D24. **KW** Mixed Integer Programming. Cutting Planes. Production Planning. Capacitated Lot-Sizing. Setup Lines.

AB Instances of the multi-item capacitated lot-sizing problem with setup times (MCL) often appear in practice, either in standard form or with additional constraints, but they have generally been difficult to solve to optimality. In MCL demand for multiple items must be met over a time horizon, items compete for a shared capacity, and each setup uses up some of this capacity. In this paper we use results concerning the polyhedral structure of simplified models obtained from a single time period of MCL to obtain strong valid inequalities for MCL. To the best of our knowledge, these inequalities are the first to consider demand for multiple items and the joint capacity restriction simultaneously. We also discuss how to implement these inequalities successfully in a branch-and-cut algorithm. Our computational results suggest that our contributions represent significant progress in solving instances of MCL.

Miller, Douglas

TI Public Policy and Extended Families: Evidence from South Africa. **AU** Bertrand, Marianne; Miller, Douglas; Mullainathan, Sendhil.

Mimouni, Mondher

TI A First Assessment of Environment-Related Trade Barriers. **AU** Fontagne, Lionel; von Kirchbach, Friedrich; Mimouni, Mondher.

Minten, Bart

TI Property Rights in a Flea Market Economy. **AU** Fafchamps, Marcel; Minten, Bart.

Mirza, Daniel

TI International Trade and Rent Sharing in Developed and Developing Countries. **AU** Fontagne, Lionel; Mirza, Daniel.

Mitchell, Olivia S.

PD October 1999. **TI** New Trends in Pension Benefit and Retirement Provisions. **AA** University of Pennsylvania and NBER. **SR** National Bureau of Economic Research Working Paper: 7381; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** \$5.00. **JE** G23, J14, J26, J33. **KW** Pension Funds. Defined Benefits. Defined Contributions. Retirement. Compensation.

AB This study illustrates and interprets changes in pension plan retirement formulas and benefit provisions over the last two decades, using extensive information on private sector pension plans gathered by the U.S. Department of Labor since 1980. Data generated from the Employee Benefits Survey (EBS) of medium and large firms shows that pension provisions have changed a great deal in companies that have traditionally been the most consistent providers of employer-sponsored retirement benefits in the US. In the defined benefit environment, some changes include loosening vesting rules somewhat; easing access to normal retirement; and moving pension benefit formulas toward final rather than career earnings, with increased weight on straight-time pay. In addition, these plans became more integrated with social security, but the form of this integration has changed substantially. The defined contribution environment has also seen substantial change, as documented in the BLS series. Participation and vesting rules appear most lenient for workers in 401(k) plans; most employees must contribute to their plans, generally as a function of earnings; and employee access to pension fund assets appears to be on the upswing over time.

Mocan, H. Naci

PD March 2000. **TI** A Dynamic Model of Differential Human Capital and Criminal Activity. **AU** Mocan, H. Naci; Billups, Stephen C. **AA** Mocan: University of Colorado at Denver and National Bureau of Economic Research. Billups: University of Colorado at Denver. **SR** National Bureau of Economic Research Working Paper: 7584; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 22. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** C61, J24, K42. **KW** Occupational Choice. Illegal Behavior. Dynamic Analysis.

AB This paper presents a dynamic economic model of criminal activity. Individuals are endowed with legal and

criminal human capital. Potential incomes in legal and criminal sectors depend on the level of the relevant human capital, the rate of return, and random shocks. Both types of human capital can be enhanced by participating in the relevant sector. Legal human capital can also be enhanced through savings. Each type of human capital is subject to depreciation. Individuals maximize expected discounted lifetime utility, which depends on consumption. In this two-stage dynamic stochastic model, in each period the individual decides in which sector to participate (legal or illegal), and after the realization of income in that period, he decides on the optimal amount of consumption. A particular decision (e.g., participation in the criminal sector) has implications for both future decisions as well as the choices available to the individual in later periods. The model allows analyses of the effects of recessions, neighborhood effects, risk aversion, various imprisonment/rehabilitation scenarios, and time preferences on criminal behavior. It provides new insights, which are different from existing models, and it is able to explain the declining propensity of individuals to commit crimes over time.

Mondello, Gerard

PD June 2000. **TI** Environmental Liability and Technology Choice: A Duopolistic Analysis. **AU** Mondello, Gerard; Tidball, M. **AA** Mondello: LATAPSES/CNRS-UNSA, France. Tidball: Universidad Nacional de Rosario, Argentina. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/31; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 20. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C72, D43, D81, K32. **KW** Duopoly. Environmental Investment. Liability Theory.

AB This paper focuses both on the competition process and the firms' liability in environmental protection and the demonstration is made by comparing two models of safety investment. The first one shows sensitive players to their environmental liability: they seek to minimize the technologies accident risk while the second one corresponds to a much more standard choice. The players' main preoccupation is about their market share even if they care about liability. Then, from a very simple duopolistic competition model with strict liability, we show, first, that the way the firms assess the environmental question is not neutral on their expected performances. Second, that the associated level of technology to the liability concern -- i.e. a high level of care or a low one -- have a different impact on profitability. Consequently, the competitors' general attitude, their beliefs and the institutional rules have strong effects on the environmental investment assessments. More precisely, the enforcing rule the players will adopt will play directly on the performance, not only of one firm, but on the whole set of industrial firms.

Montagna, Catia

TI Unionisation and Foreign Direct Investment. **AU** Leahy, Dermot; Montagna, Catia.

Moon, Hyungsik Roger

PD August 2000. **TI** GMM Estimation of Autoregressive Roots Near Unity with Panel Data. **AU** Moon, Hyungsik Roger; Phillips, Peter C. B. **AA** Moon: USC. Phillips: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1274; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website:

www.econ.yale.edu/cowles. **PG** 54. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** C22, C23. **KW** Bias. Boundary Point Asymptotics. GMM Estimation. Moment Conditions. Panel Data.

AB This paper investigates a generalized method of moments (GMM) approach to the estimation of autoregressive roots near unity with panel data. The two moment conditions studied are obtained by constructing bias corrections to the score functions under OLS and GLS detrending, respectively. It is shown that the moment condition under GLS detrending corresponds to taking the projected score on the Bhattacharya basis, linking the approach to recent work on projected score methods for models with infinite numbers of nuisance parameters (Waterman and Lindsay, 1998). Assuming that the localizing parameter takes a nonpositive value, we establish consistency of the GMM estimator and find its limiting distribution. A notable new finding is that the GMM estimator has convergence rate $n^{1/6}$, slower than $n^{1/2}$, when the true localizing parameter is zero (i. e., when there is a panel unit root) and the deterministic trends in the panel are linear. These results, which rely on boundary point asymptotics, point to the continued difficulty of distinguishing unit roots from local alternatives, even when there is an infinity of additional data.

Moore, John

TI On the Design of Hierarchies: Coordination Versus Specialization. **AU** Hart, Oliver; Moore, John.

Morgenstern, Richard D.

PD October 1998. **TI** Job Versus the Environment: Is There a Trade-Off? **AU** Morgenstern, Richard D.; Pizer, William A.; Shih, Jhih-Shyang. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/01; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 37. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D24, J23, J40, L51, Q28. **KW** Environmental Costs. Translog Cost Function. Employment. Regulation. Labor Demand.

AB Business and labor leaders often maintain that workers in heavily regulated industries are adversely affected by environmental policies. Using the industry as the level of analysis and allowing job gains and losses within an industry to offset each other, we explore how environmental stringency affects demand for labor. We use environmental spending as a proxy for regulation and develop an analytical framework with three components -- substitution among factor inputs, changes in total production expenditures, and changes in output quantities demanded -- to link environmental spending and employment in four regulated industries: pulp and paper, plastics, petroleum refining, and iron and steel. We find that increased environmental spending generally does not reduce industry-level employment. Negative demand effects are mitigated by employment gains from increased production expenditures and changes in the mix of factor inputs, and in two industries employment rises significantly. This study therefore questions the very existence of the "jobs-versus-the-environment" trade-off.

TI On the Accuracy of Regulatory Cost Estimates. **AU** Harrington, Winston; Morgenstern, Richard D.; Nelson, Peter.

TI The Rationale for Flexibility in the Design of Greenhouse Gas Abatement Policies: A Review of Economic

Issues. **AU** Anderson, John; Morgenstern, Richard D.; Toman, Michael A.

Morris, Stephen

PD September 2000. **TI** Global Games: Theory and Applications. **AU** Morris, Stephen; Shin, Hyun Song. **AA** Morris: Yale University. Shin: London School of Economics. **SR** Yale Cowles Foundation Discussion Paper: 1275; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. **PG** 67. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** C72, D82. **KW** Global Games. Common Knowledge. Incomplete Information. Currency Crises. Banking.

AB Global games are games of incomplete information whose type space is determined by the players each observing a noisy signal of the underlying state. With strategic complementarities, global games often have a unique, dominance solvable equilibrium, allowing analysis of a number of economic models of coordination failure. For symmetric binary action global games, equilibrium strategies in the limit (as noise becomes negligible) are simple to characterize in terms of "diffuse" beliefs over the actions of others. We describe a number of economic applications that fall in this category. We also explore the distinctive roles of public and private information in this setting, review results for general global games, discuss the relationship between global games and a literature on higher order beliefs in game theory and describe the relationship to local interaction and dynamic games with payoff shocks.

Moscarini, Giuseppe

PD October 1999. **TI** Price Competition for an Informed Buyer. **AU** Moscarini, Giuseppe; Ottaviani, Marco. **AA** Moscarini: Yale University. Ottaviani: University College London. **SR** University College London Discussion Papers in Economics: 99/06; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 23. **PR** 4 pounds or \$8.00. **JE** C72, D43, D82, L13, L15. **KW** Price Competition. Private Information. Relative Quality. Hotelling Game. Oligopoly.

AB This paper investigates simultaneous prior competition with private information on the demand side. Each of two sellers offers a different variety of a good to a buyer endowed with a private binary signal on their relative quality. This prototypical model provides a simple informational foundation to the Hotelling game. Equilibrium comparative statics is performed with respect to the (common) prior belief on the relative quality of the goods and the precision of the buyer's private information. Competition is fierce when the prior belief is biased in favor of one good and private signals are not very informative. Competing sellers do not necessarily benefit from revelation of public information and their equilibrium profits are non-monotonic in the prior belief.

Mourato, Susanna

TI Conflicts in Conservation: Aggregating Total Economic Values. **AU** Swanson, Timothy; Mourato, Susanna; Swierzbinski, Joe; Kontoleon, Andreas.

Moyo, Dambisa

TI Are Cash Budgets a Cure for Excess Fiscal Deficits (and

at What Cost)? AU Stasavage, David; Moyo, Dambisa.

Muelbauer, John

TI Personal and Corporate Saving in South Africa. AU Aron, Janine; Muelbauer, John.

TI Financial Liberalisation, Consumption and Debt in South Africa. AU Aron, Janine; Muelbauer, John.

TI Inflation and Output Forecasts for South Africa: Monetary Transmission Implications. AU Aron, Janine; Muelbauer, John.

PD 1999. TI Estimates of Personal Sector Wealth for South Africa. AU Muelbauer, John; Aron, Janine. AA CSAE, University of Oxford. SR Centre for the Study of African Economies Working Paper: WPS/1999/17; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford. OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. PG 23. PR 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). JE D12, D31. KW Personal Wealth. South Africa. Pension Wealth. Housing Wealth.

AB This paper constructs the first coherent set of aggregate personal sector wealth estimates at market value for South Africa. Our estimates derive from data published by the Reserve Bank on financial flows and various other capital market data, much of it at book value. Our methods rely, where relevant, on accumulating flow of funds data using appropriate benchmarks, and, where necessary, converting book to market values using appropriate asset price indices. The paper plots asset to income ratios for various asset classes, and by relating these to asset price movements and rates of return, throws some light on changes in the composition of personal sector wealth. Striking changes have been the rise in pension wealth -- overtaking housing wealth in the early 1990s, the rise in debt, and the relative decline of liquid assets and housing wealth since the early and mid-1980s, respectively. Areas of current ignorance are highlighted, particularly those concerning foreign assets, the unincorporated business sector and the nature of pension rights.

Mulder, Nanno

TI Capital Stock and Productivity in French Transport: An International Comparison. AU Chane Kune, Bernard; Mulder, Nanno.

TI Sector Sensitivity to Exchange Rate Fluctuations. AU Fouquin, Michel; Sekkat, Khalid; Mansour, Malek J.; Mulder, Nanno; Nayman, Laurence.

TI Sector Sensitivity to Exchange Rate Fluctuations. AU Fouquin, Michel; Sekkat, Khalid; Mansour, Malek J.; Mulder, Nanno; Nayman, Laurence.

Mullainathan, Sendhil

TI Public Policy and Extended Families: Evidence from South Africa. AU Bertrand, Marianne; Miller, Douglas; Mullainathan, Sendhil.

TI Do CEOs Set Their Own Pay? The Ones Without Principals Do. AU Bertrand, Marianne; Mullainathan, Sendhil.

Muller, Holger M.

TI Project Bundling, Liquidity Spillovers, and Capital

Market Discipline. AU Inderst, Roman; Muller, Holger M.

Munasinghe, Lalith

PD February 2000. TI Why Do Dancers Smoke? Time Preference, Occupational Choice, and Wage Growth. AU Munasinghe, Lalith; Sicherman, Nachum. AA Munasinghe: Columbia University, Sicherman: Columbia University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 7542; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. PG 10. PR \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). JE I10, J20, J30. KW Tobacco Use. Occupational Choice. Time Preference.

AB Time preference is a key determinant of occupational choice and investments in human capital. Since careers are characterized by different wage growth prospects, individual discount rates play an important role in the relative valuation of jobs or occupations. We predict that individuals with lower discount rates are more likely to select into jobs or occupations with steeper wage profiles. To test this hypothesis we use smoking as an instrument for time preference. Panel data from the National Longitudinal Survey of Youth (NLSY) (1979-94) are ideal for our purposes since it contains information on smoking behavior, in addition to detailed work histories and other socio-economic variables. We find that smokers have substantially flatter wage profiles, and a higher marginal rate of substitution of current wages for future wages. Incidentally, a survey of several hundred undergraduates at Barnard and Columbia College show that dance majors have the highest smoking rate.

Murphy, Kevin J.

TI Optimal Exercise Prices for Executive Stock Options. AU Hall, Brian J.; Murphy, Kevin J.

Muwonge, James

TI Changes in Poverty in Uganda, 1992-1997. AU Appleton, Simon; Emwanu, Tom; Kagugube, Johnson; Muwonge, James.

Myerson, Roger B.

PD March 2000. TI Economic Analysis of Constitutions. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1291; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 24. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE B41, D72, K10, P16. KW Constitutional Analysis. Political Economics. Economic Methodology. Political Processes. Law.

AB This paper is a preliminary draft of an article to appear in Chicago Law Review (2000), as part of a symposium reviewing two new books on economic analysis of constitutions: Dennis Mueller's *Constitutional Democracy* and Robert Cooter's *Strategic Constitution*. Some of the basic questions of constitutional analysis are introduced, and the importance of work in this area is shown as one of the major new developments in social theory. The methods of economic theory are then shown to be particularly appropriate and useful

for such constitutional analysis. The author then tries to follow Cooter and Mueller in sketching some of the most important results of economic analysis of constitutional structures, but finds a perspective quite different from theirs.

Nayman, Laurence

PD December 2001. TI The French-German Productivity Comparison Revisited: Ten Years after the German Reunification. AU Nayman, Laurence; Unal-Kesenci, Deniz. AA CEPII. SR CEPII Working Paper: 2001/14; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. PG 89. PR no charge. JE E31, J24, J30, L60, O47. KW Relative Price Level. Sectoral Productivity. Unit Labor Costs. Growth Accounting. German Unification. AB This study compares manufacturing output and productivity levels between France and Germany since the German unification. Taking as a benchmark the year 1997, the relative price level is calculated with the industry-of-origin method. The French level of productivity in terms of labor, capital and their combination is below the German one in 1997. However, with respect to cost competitiveness, France takes advantage of lower unit labor costs than Germany. Over the 90s, the factor productivity catch-up France achieved is significant. Disparities between the eastern and the western German that resulted in a lesser productivity growth remain large. But the commitment of the east into more high-tech production processes using skilled labor could turn in the future into competitiveness gains for all Germany.

Nelson, Peter

TI On the Accuracy of Regulatory Cost Estimates. AU Harrington, Winston; Morgenstern, Richard D.; Nelson, Peter.

Nelson, Richard R.

TI Protecting Their Intellectual Assets: Appropriability Conditions and Why U.S. Manufacturing Firms Patent (or Not). AU Cohen, Wesley M.; Nelson, Richard R.; Walsh, John.

Nelson, Robert H.

PD November 1998. TI Rethinking Scientific Management. AA University of Maryland and Competitive Enterprise Institute. SR Resources for the Future Discussion Paper: 99/07; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. PG 18. PR Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. JE H41, N52, Q23, Q28. KW Scientific Management. Progressive Era. Forestry. Forest Service. Decentralization.

AB The U.S. Forest Service was founded early in the twentieth century with the progressive mission to achieve the scientific management of the forests of the United States. Scientific management was in part a political theory, holding out a model by which social values and technical considerations should function separately in the political process. However, since the 1970s the autonomy of Forest Service professionals to manage the national forests has been undermined by judicial decisions, White House and other executive branch oversight, and routine Congressional interference. Ecological management is a new attempt in the 1990s to revive scientific management but it is not likely to be any more successful than previous efforts. Instead, a new

governing paradigm is needed for the national forests. This new vision is likely to involve a turn towards greater decentralization of governing responsibility than is prescribed by the scientific management model.

Nemhauser, George L.

TI Solving Multi-Item Capacitated Lot-Sizing Problems with Setup Times by Branch-and-Cut. AU Miller, Andrew J.; Nemhauser, George L.; Savelsbergh, Martin W. P.

Nesterov, Yu

PD April 2000. TI Stable Dynamics in Transportation Systems. AU Nesterov, Yu.; Palma, Andre de. AA Nesterov: CORE. Palma: THEMA. SR Universite Catholique de Louvain, CORE Discussion Paper: 2000/26; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. PG 30. PR \$100 per year. JE C40, C50, C61, R41. KW Convex Optimization. Static Models. Shortest Path. Variational Inequalities. Traffic Network Models.

AB We present a new class of transportation systems, the stable dynamics models, which provides a natural link between the static and dynamic traffic network models. They can be seen as steady states of dynamic networks (flows are constant in time). These models turn out to be very easy to study analytically for simple networks. Moreover, they can be extended for large networks, for which efficient (and standard) algorithms to solve for equilibrium can be derived. We also present a formulation for the endogenous origin-destination case. Finally, this class of models leads to very natural and simple calibration methods.

Neumark, David

PD March 2000. TI Using the EITC to Help Poor Families: New Evidence and a Comparison with the Minimum Wage. AU Neumark, David; Wascher, William. AA Neumark: Michigan State University and National Bureau Of Economic Research. Wascher: Board of Governors of the Federal Reserve System. SR National Bureau of Economic Research Working Paper: 7599; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. PG 27. PR \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). JE I32, J39. KW Earned Income Tax Credit. Poverty, United States.

AB This paper evaluates the effects of the earned income tax credit (EITC) on poor families. Exploring state-level variation in EITCs, it is found that the EITC helps families rise above poverty-level earnings. This occurs by inducing labor market entry in families that initially do not have an adult in the workforce. Evidence based on the federal EITC is less supportive of a positive impact of the EITC on poor families. Finally, our results suggest that for the range of policy changes typical of recent history in the U.S., the EITC is more beneficial for poor families than is the minimum wage.

PD March 2000. TI Do Living Wage Ordinances Reduce Urban Poverty? AU Neumark, David; Adams, Scott. AA Neumark: Michigan State University and National Bureau of Economic Research. Adams: Michigan State University. SR National Bureau of Economic Research Working Paper: 7606; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website:

www.nber.org. **PG** 30. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** I32, J23, R38. **KW** Poverty, United States. Living Wage.

AB Many cities in the United States have passed living wage ordinances. These ordinances typically mandate that businesses under contract with the city or, in some cases, receiving assistance from the city, must pay their workers a wage sufficient to support a family financially. To date, there has been no empirical analysis of the actual effects of living wages on the expected beneficiaries -- low-wage workers and their families. This paper estimates the effects of city living wage ordinances on the wages and hours of workers in cities that have adopted such legislation. We also look at the effects of the ordinances on employment and poverty rates in these cities. Our findings indicate that living wage ordinances boost wages of low-wage workers. The estimated elasticities are small, however, which seems consistent with the fact that living wages have limited coverage, and may also have limited compliance and enforcement. In addition to the wage effects, we find weak negative hours effects of living wage ordinances on low-wage workers, and strong negative employment effects. Finally, estimates of the effects of living wages on poverty rates indicate that living wage ordinances may help to achieve modest reductions in urban poverty.

TI Do "High Performance" Work Practices Improve Establishment-Level Outcomes? **AU** Cappelli, Peter; Neumark, David.

Newell, Richard G.

PD May 2000. **TI** Regulating Stock Externalities Under Uncertainty. **AU** Newell, Richard G.; Pizer, William A. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/31R; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 43. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** C61, D62, D81, Q25, Q28. **KW** Environmental Regulation. Climate Change. Stock Externalities. Taxation. Tradable Permits.

AB We uncover several important principles governing the choice of price-based (e.g., taxes) relative to quantity-based policies (e.g., tradable permits) for controlling stock externalities. Determinants of relative instrument efficiency include the relative slopes of marginal benefits and costs, decay rate, discount rate, and degree of correlation in cost uncertainty. We also demonstrate an important link between instrument choice and policy stringency, since both policy elements depend on the same information. For negative externalities, less stringent controls and price instruments are both associated with flatter marginal benefits, while aggressive controls and quantity instruments are associated with steeper marginal benefits. This linkage weighs heavily in favor of price instruments for controlling stock externalities. For climate policy, we find that price-based policies generate several times the expected net benefits of quantity-based policies. Regardless of one's beliefs about various parameter values, we find that low aggregate abatement levels are inconsistent with quantity-based emission limits.

PD November 2000. **TI** Cost Heterogeneity and the Potential Savings from Market-Based Policies. **AU** Newell, Richard G.; Stavins, Robert N. **AA** Newell: Resources for the Future. Stavins: Harvard University and Resources for the Future. **SR** Resources for the Future Discussion Paper:

00/10; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 23. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** Q28, Q38, Q48. **KW** Environmental Policy. Cost-Effectiveness. Market-Based Instruments. Tradable Permits. Uniform Standards.

AB Policy makers and policy analysts are frequently faced with situations where it is unclear whether market-based instruments hold real promise of reducing costs, relative to conventional command-and-control approaches. We develop rules-of-thumb that can be employed with minimal amounts of information to estimate the potential cost savings associated with market-based policies, with an application to the environmental policy realm. Our hope is that these simple formulae can aid policy analysts and policy makers in the early stages of exploring alternative policy instruments by helping them identify approaches that merit greater attention and more detailed analysis. We illustrate the use of the rules-of-thumb with an application to nitrogen oxides control in the eastern United States.

PD December 1999. **TI** Climate Change and Forest Sinks: Factors Affecting the Costs of Carbon Sequestration. **AU** Newell, Richard G.; Stavins, Robert N. **AA** Newell: Resources for the Future. Stavins: Harvard University and Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/31R; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 43. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** Q15, Q23, Q28. **KW** Climate Policy. Forests. Carbon Sinks. Sequestration Costs. Forestry.

AB The possibility of encouraging the growth of forests as a means of sequestering carbon dioxide has received considerable attention, partly because of evidence that this can be a relatively inexpensive means of combating climate change. But how sensitive are such estimates to specific conditions? We examine the sensitivity of carbon sequestration costs to changes in critical factors, including the nature of management and deforestation regimes, silvicultural species, relative prices, and discount rates. We find, somewhat counter-intuitively, that the costs of carbon sequestration can be greater if trees are periodically harvested, rather than permanently established. Importantly, retarded deforestation can sequester carbon at substantially lower costs than increased forestation. These results depend in part on the time profile of sequestration and the amount of carbon released upon harvest, both of which may vary by species, geographic location, and management regime, and are subject to scientific uncertainty.

Newman, Andrew F.

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

Nicodano, Giovanna

TI Insider Trading, Investment and Liquidity. **AU** Bhattacharya, Sudipto; Nicodano, Giovanna.

Nishimura, Yukihiro

PD February 2000. **TI** Optimal Nonlinear Income Taxation for Reduction of Envy. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 991; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/

index.html. **PG** 22. **PR** Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. **JE** D63, H21. **KW** Income Taxation. Envy.

AB This paper examines the optimal nonlinear income taxation problem based on Chaudhuri (1986) and Diamantaras and Thomson's (1990) λ -equitability in a two-class economy. An allocation is λ -equitable if no agent envies a proportion λ of the bundle of any other agent. We examine the properties of Pareto undominated allocations for various λ -equitability requirements. When there is one output, the marginal income tax rate can increase only if (but not if) leisure is a luxury. In a multi-commodity model with commodity taxes, the goods preferred by the low skilled agent and/or of high Hicksian elasticities are taxed more heavily.

PD February 2000. **TI** Optimal Commodity Taxation for Reduction of Envy. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 992; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html. **PG** 32. **PR** Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. **JE** D63, H21. **KW** Optimal Taxation. Envy.

AB This paper derives optimal commodity taxes in a two-class economy, based on Chaudhuri (1986) and Diamantaras and Thomson's (1990) λ -equitability. An allocation is λ -equitable if no agent envies a proportion λ of the bundle of any other agent. We examine the properties of Pareto undominated allocations for various λ -equitability requirements. In contrast with the classic Ramsey rule and its extension, ceteris paribus, the goods preferred by the low skilled agent and/or of high Hicksian elasticities are taxed more heavily. As to the total tax burden, the envying agent may bear a higher tax burden, since the good which he likes should be taxed more heavily to reduce envy. Also, due to the conflict between welfare of the envying agent and his envy, there exists an economy in which the Diamantaras-Thomson allocation -- an allocation which maximizes λ in the range of Pareto efficient allocations -- is the Pareto efficient allocation which minimizes the welfare of the envying agent.

Nordhaus, William D.

PD November 2000. **TI** Alternative Methods for Measuring Productivity Growth. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1282; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. **PG** 16. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** C82, D24, E30, O30, O47. **KW** Productivity. Index Numbers. Growth.

AB The present study is a contribution to the theory of the measurement of productivity growth. First, it examines the welfare-theoretic basis for measuring productivity growth and shows that the ideal welfare-theoretic measure is a chain index of productivity growth rates of different sectors which uses current output weights. Second, it lays out a technique for decomposing productivity growth which separates aggregate productivity growth into three factors -- the pure productivity effect, the effect of changing shares, and the effect of different productivity levels. Finally, it shows how to apply the theoretically correct measure of productivity growth and indicates which of the three different components should be

included in a welfare-oriented measure of productivity growth. The study concludes that none of the measures generally used to measure productivity growth is consistent with the theoretically correct measure.

PD November 2000. **TI** Productivity Growth and the New Economy. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1284; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. **PG** 42. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** C82, D24, E30, J24, O47. **KW** Productivity. New Economy. Well-Measured Output. Growth. Labor Productivity.

AB The present study is the third in a series of three papers devoted to issues in the measurement of productivity and productivity growth. The major findings are as follows. First, this study shows that the new data set used here, which develops data on total output, business sector output, and "well-measured" output, and relies on income-side data, provides a useful supplement to existing data sets. Second, there has clearly been a rebound in labor-productivity growth in recent years. All three sectoral definitions show a major acceleration in labor productivity in the last three years of the period (1996-98) relative to the 1978-95 period. Third, productivity growth in the new economy sectors has made a significant contribution to economy-wide productivity growth. Finally for all three output measures, there has been a substantial upturn in labor-productivity growth outside the new economy. After removing the direct effect of new economy sectors, the productivity acceleration was 0.54 percentage points for total GDP, 0.65 percentage points for business output, and 1.18 percentage points for well-measured output. It is clear that the productivity rebound is not narrowly focused in a few new-economy sectors.

PD November 2000. **TI** New Data and Output Concepts for Understanding Productivity Trends. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1286; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. **PG** 32. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** C82, D24, E30, O30, O47. **KW** Productivity. New Economy. Price Measurement. Well-Measured Output. Growth.

AB The present study is the second in a series of three papers devoted to issues in the measurement of productivity and productivity growth. First, it introduces a new approach to measuring industrial productivity based on income-side data that are published by the Bureau of Economic Analysis (BEA). The data are internally consistent in that both inputs and outputs are income-side measures of value added, whereas the usual productivity measures combine expenditure-side output measures with income-side input measures. Second, because of interest in the "new economy," we have also constructed a set of new-economy accounts. For the purpose of this study, we define the new economy as machinery, electric equipment, telephone and telegraph, and software. Finally, because of concerns about poor deflation in the current output measures, this study constructs a new output concept called "well-measured output," which includes only those sectors for which output is relatively well measured. We present a brief summary of the behavior of the alternative measures.

Nsouli, Saleh M.

TI "Big Bang" Versus Gradualism in Economic Reforms: An Intertemporal Analysis with an Application to China. **AU** Feltenstein, Andrew; Nsouli, Saleh M.

Nunes, Luis Catela

TI Moving the Escudo into the Euro. **AU** Braga de Macedo, Jorge; Covas, Francisco; Nunes, Luis Catela.

O'Connell, Stephen A.

TI Aid Versus Trade Revisited. **AU** Adam, Christopher S.; O'Connell, Stephen A.

Oduro, Abena

TI Ethnicity and Wage Determination in Ghana. **AU** Barr, Abigail; Oduro, Abena.

Ok, Efe A.

TI Expected Utility Theory without the Completeness Axiom. **AU** Dubra, Juan; Maccheroni, Fabio; Ok, Efe A.

Olivei, Giovanni

TI Capital Account Liberalization, Financial Depth, and Economic Growth. **AU** Klein, Michael W.; Olivei, Giovanni.

TI Capital Account Liberalization, Financial Depth, and Economic Growth. **AU** Klein, Michael W.; Olivei, Giovanni.

Oostendorp, Remco

TI Inventories and Risk in African Manufacturing. **AU** Fafchamps, Marcel; Gunning, Jan Willem; Oostendorp, Remco.

Ord, Keith

TI Forecasting for Inventory Control With Exponential Smoothing. **AU** Snyder, Ralph D.; Koehler, Anne B.; Ord, Keith.

Ortega, Francisco

PD October 2000. **TI** A Branch-and-Cut Algorithm for the Single Commodity Uncapacitated Fixed Charge Network Flow Problem. **AU** Ortega, Francisco; Wolsey, Laurence A. **AA** CORE and INMA. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/49; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 20. **PR** \$100 per year. **JE** C61, D24, R41. **KW** Network Design. Fixed Charge. Branch and Cut. Dicut Inequalities. Branching.

AB We present a branch-and-cut algorithm to solve the single commodity uncapacitated fixed charge network flow problem, which includes the Steiner tree problem, uncapacitated lot-sizing problems, and the fixed charge transportation problem as special cases. The cuts used are simple dicut inequalities and their variants. A crucial problem when separating these inequalities is to find the right cut set on which to generate the inequalities. The prototype branch-and-cut system, bc - nd, includes a separation heuristic for the dicut inequalities, and problem specific primal heuristics, branching and pruning rules. Computational results show that bc - nd is competitive compared to a variety of special purpose algorithms for problems with explicit flow costs. We also

examine how general purpose MIP systems perform on such problems when provided with formulations that have been tightened a priori with dicut inequalities.

Ottaviani, Marco

PD August 1998. **TI** Herd Behavior and Investment: Comment. **AU** Ottaviani, Marco; Sorensen, Peter. **AA** Ottaviani: University College London. Sorensen: University of Copenhagen. **SR** University College London Discussion Papers in Economics: 98/14; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 7. **PR** 4 pounds or \$8.00. **JE** D82, D83, G19, G20, J30. **KW** Herd Behavior. Investment. Private Information. Reputation.

AB Scharfstein and Stein (1990) argue that herding arises because of concerns for reputation when signals of good forecasters are correlated conditional on the state of the world. We show that in their model the assumption of correlation is generally not needed other than for the knife-edge parameters they consider. This can be easily seen by exploiting a parallel with models of statistical herding. When instead the signal has unbounded precision on the state of the world and sufficiently bounded precision on own ability, correlation is indeed necessary and sufficient to obtain herding.

PD December 1998. **TI** Information Aggregation in Debate. **AU** Ottaviani, Marco; Sorensen, Peter. **AA** Ottaviani: University College London. Sorensen: University of Copenhagen. **SR** University College London Discussion Papers in Economics: 98/15; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 30. **PR** 4 pounds or \$8.00. **JE** D72, D82, D83. **KW** Anti-Seniority. Information Aggregation. Optimal Order. Reputation. Herding.

AB Privately informed individuals (experts) speak openly in front of other members of a committee about the desirability of a public decision. Each expert aims at appearing well informed. After establishing an equivalence to the observational learning model, we study the optimal order in which such experts should speak in a binary model with experts of heterogeneous ability. It is not always optimal to use the anti-seniority rule whereby experts speak in order of increasing ability. A committee with more able experts may be afflicted by greater herding problems, yielding a worse outcome.

PD December 1998. **TI** The Value of Public Information in Monopoly. **AU** Ottaviani, Marco; Prat, Andrea. **AA** Ottaviani: University College London. Prat: Tilburg University. **SR** University College London Discussion Papers in Economics: 98/16; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 6. **PR** 4 pounds or \$8.00. **JE** D42, D82, D83, L12, L15. **KW** Linkage Principle. Monopoly. Product Quality. Public Information. Price Discrimination.

AB We show that a non-linear pricing multi-product monopolist who sells to a single buyer always prefers to commit to reveal public (affiliated) information about its products. The logic of the linkage principle of Milgrom and Weber (1982) extends to price discrimination.

PD April 1999. **TI** Professional Advice. **AU** Ottaviani, Marco; Sorensen, Peter. **AA** Ottaviani: University College

London. Sorensen: University of Copenhagen. SR University College London Discussion Papers in Economics: 99/04; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. PG 24. PR 4 pounds or \$8.00. JE D72, D82, D83, G20, J30. KW Reputation. Cheap Talk. Advice. Private Information. Learning.

AB Professional experts offer advice with the objective of appearing well informed. Their ability is evaluated on the basis of the advice given and the realized state of the world. Our reputational sender-receiver game features continuous signal, state, and ability type spaces, and the message space is as rich as the signal space. Nevertheless, at best two messages are sent in the most informative equilibrium; the sender can transmit only the direction but not the intensity of the information possessed. Equilibrium forecasts are then systematically less precise than under truth-telling, and learning on the expert's ability is slow.

TI Price Competition for an Informed Buyer. AU Moscarini, Giuseppe; Ottaviani, Marco.

PD November 1999. TI Notes on Reputational Cheap Talk. AU Ottaviani, Marco; Sorensen, Peter. AA Ottaviani: University College London. Sorensen: University of Copenhagen. SR University College London Discussion Papers in Economics: 99/05; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. PG 40. PR 4 pounds or \$8.00. JE D72, D82, D83, G20, J30. KW Reputation. Cheap Talk. Equilibrium. Private Information. Advice.

AB A privately informed individual (expert) sends a message about the information possessed with the objective of appearing to be an able forecaster. More able experts have access to more informative experiments in the Blackwell sense. The receiver updates the belief on the informativeness of the sender based on the message and the realization of the state of the world. The paper studies the features of the equilibria of this cheap-talk game in general. We provide conditions under which the most informative equilibria have a coarse nature. Robust examples with multiple informative equilibria and conditions which lead to the impossibility of revealing any information in equilibrium are given. We illustrate our findings with robust examples with continuous state, signal, and ability type spaces.

Overman, Henry G.

TI Unemployment Clusters Across European Regions and Countries. AU Puga, Diego; Overman, Henry G.

Owens, Trudy

PD January 2001. TI The Impact of Agricultural Extension on Farm Production in Resettlement Areas of Zimbabwe. AU Owens, Trudy; Hoddinott, John; Kinsey, Bill. AA Owens: CSAE, University of Oxford. Hoddinott: Dalhousie University. Kinsey: University of Zimbabwe and Free University. SR Centre for the Study of African Economies Working Paper: WPS/2001/06; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. PG 16. PR 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). JE O13, Q16. KW Agricultural Extension. Zimbabwe.

AB In this paper, we revisit the contested issue of the impact of agricultural extension on farm production. We exploit two features of the data available to us: its longitudinal nature and explicit measures of farmer ability. We find that after controlling for innate productivity characteristics and farmer ability either using household fixed effects estimation, or by including a measure of farmer ability and village fixed effects, access to agricultural extension services, defined as receiving one or two visits per agricultural year, raises the value of crop production by about 15 per cent. This parameter estimate is statistically significant. However, we also find variability in these parameter estimates across individual crop years, with the impact being markedly different in drought and non-drought years. Collectively, these results suggest that although access to farm-level extension visits does increase productivity even after controlling for innate productivity characteristics and farmer ability, results from single-year cross-sectional studies should be treated with caution.

TI Revisiting Forever Gained: Income Dynamics in the Resettlement Areas of Zimbabwe, 1983-1997. AU Gunning, Jan Willem; Hoddinott, John; Kinsey, Bill; Owens, Trudy.

Pacula, Rosalie Liccardo

TI The Effectiveness of Workplace Drug Prevention Policies: Does 'Zero Tolerance' Work? AU Mehay, Stephen L.; Pacula, Rosalie Liccardo.

Paddison, Oliver

TI Growth and Equality Effects of Pension Plans. AU Docquier, Frederic; Paddison, Oliver.

Pagano, Marco

PD November 1999. TI Legal Determinants of the Return on Equity. AU Pagano, Marco; Lombardo, Davide. AA Pagano: CSEF, Università di Salerno. Lombardo: Stanford University. SR Centre for Economic Policy Research Discussion Paper: 2275; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. PG 64. PR 5 pounds, \$8 or 8 euros. JE G12, K22, K42. KW Law. Enforcement. Shareholder Protection. Corporate Governance. Equity Return.

AB Recent work documents that better legal institutions are associated with broader equity markets. This paper investigates whether international differences in legal institutions also help explain the international cross-section of expected stock returns by documenting three main regularities. First, total stock market returns are positively correlated with overall measures of the quality of institutions, such as judicial efficiency and rule of law, but have no relationship with measures of shareholder rights, controlling for risk. Second, dividend yields and earning-price ratios also correlate positively with judicial efficiency and rule of law, but negatively with shareholder rights' protection, controlling for risk and expected earnings growth. Thirdly, the excess return on new issues is negatively associated with the quality of accounting standards. Thus the positive effect of the overall quality of institutions on equity returns is interpreted as capturing the resulting curtailment of private benefits and increase of profitability, under imperfect international integration of stock markets. The negative impact of shareholders' legal protection and of accounting standards can instead be seen as resulting from the implied reduction in shareholders' auditing and monitoring costs.

PD November 1999. **TI** Law and Equity Markets: A Simple Model. **AU** Pagano, Marco; Lombardo, Davide. **AA** Pagano: CSEF, Università di Salerno. Lombardo: Stanford University. **SR** Centre for Economic Policy Research Discussion Paper: 2276; CEPR, 90- 98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** G12, K22, K42. **KW** Law. Enforcement. Shareholder Protection. Corporate Governance. Equity Return.

AB This paper analyzes how the law and its enforcement affect equity market equilibrium. Improvements in the legal system, while invariably associated with broader equity markets, have different effects on equity returns depending on the institutional change considered and on the degree of international stock market segmentation. The model is useful to interpret the results of recent empirical work, such as La Porta et al. (1997) and Lombardo and Pagano (1999). In particular, it can rationalize the observed cross-country pattern, whereby better institutions are associated both with broader equity markets and higher risk-adjusted returns on equity.

Palma, Andre de

TI Stable Dynamics in Transportation Systems. **AU** Nesterov, Yu.; Palma, Andre de.

Palmer, Karen

TI Sulfur Dioxide Control by Electric Utilities: What Are the Gains from Trade? **AU** Carlson, Curtis; Burtraw, Dallas; Cropper, Maureen; Palmer, Karen.

TI The Determinants of Household Recycling: A Material Specific Analysis of Unit Pricing and Recycling Program Attributes. **AU** Jenkins, Robin R.; Martinez, Salvador A.; Palmer, Karen; Podolsky, Michael J.

TI The Determinants of Household Recycling: A Material Specific Analysis of Unit Pricing and Recycling Program Attributes. **AU** Jenkins, Robin R.; Martinez, Salvador A.; Palmer, Karen; Podolsky, Michael J.

PD January 1999. **TI** Extended Product Responsibility: An Economic Assessment of Alternative Policies. **AU** Palmer, Karen; Walls, Margaret. **AA** Palmer: Resources for the Future. Walls: Resources for the Future and Victoria University. **SR** Resources for the Future Discussion Paper: 99/12; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 14. **PR** Foreign: \$15.00 Air Mail: \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** H24, H31, Q24, Q25, Q28. **KW** Solid Waste. Product Responsibility. Recycling. Unit Pricing. Environmental Policy.

AB Extended Product Responsibility embodies the notion that agents along a product chain should share responsibility for the life-cycle environmental impacts of the product, including those associated with ultimate disposal. Extended Producer Responsibility is a narrower concept which places responsibility on producers and focuses primarily on post-consumer waste disposal. Manufacturer "take-back" requirements are the policy lever most often associated with Extended Producer Responsibility. In this paper, the authors discuss alternative incentive-based policies that are consistent with the objectives of Extended Product and Producer Responsibility. They argue that an upstream combined product tax and recycling subsidy (UCTS) is generally more cost-effective and imposes fewer transaction costs than the take-

back approach. They also consider the strengths and weaknesses of a policy not targeted at producers: unit-based pricing of residential waste collection and disposal. The authors find that this option shows potential for achieving non-trivial reductions in solid waste. Widespread application in the U.S. of a \$1.00 charge per 32-gallon bag could reduce total municipal solid waste disposed by approximately 13 percent per year.

TI Winner, Loser, or Innocent Victim? Has Renewable Energy Performed as Expected? **AU** McVeigh, James; Burtraw, Dallas; Darmstadter, Joel; Palmer, Karen.

TI Ancillary Benefits of Reduced Air Pollution in the U.S. from Moderate Greenhouse Gas Mitigation Policies in the Electricity Sector. **AU** Burtraw, Dallas; Krupnick, Alan; Palmer, Karen; Paul, Anthony; Toman, Michael; Bloyd, Cary.

Parry, Ian W. H.

PD March 2000. **TI** How Important is Technological Innovation in Protecting the Environment? **AU** Parry, Ian W. H.; Pizer, William A.; Fischer, Carolyn. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/15; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 32. **PR** Foreign: \$15.00 Air Mail: \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D62, H23, H40, O38, Q28. **KW** Technological Innovation. Externalities. Environmental Policy. Welfare Impacts.

AB Economists have speculated that the welfare gains from technology that reduces the future cost of environmental protection could be more important than the "Pigouvian" welfare gains over time from correcting a pollution externality. If so, policymakers should consider the impact of environmental policies on induced innovation, and perhaps subsidize more research. We compare welfare gains from innovation with discounted Pigouvian welfare gains, using a dynamic social planning model in which research and development reduce future pollution abatement costs. We find that the discounted welfare gains from innovation are smaller than the discounted Pigouvian welfare gains. Spurring technological innovation should therefore not be emphasized at the expense of controlling pollution. More generally, our results suggest that welfare gains from innovation that reduces the costs of any public good (defense, crime prevention, infrastructure) may be smaller than those from providing the optimal amount of the public good over time.

PD June 2000. **TI** Early Emissions Reduction Programs: An Application to CO2 Policy. **AU** Parry, Ian W. H.; Toman, Michael A. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/26; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 34. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** H23, Q25, Q28, Q48. **KW** Early Reduction Credits. Carbon Emissions. Welfare Impacts. Permit Banking. Cap-and-Trade.

AB Under the 1997 Kyoto Protocol, industrialized countries would reduce greenhouse gases (GHGs) in 2008-2012. Some observers have proposed an early emissions reduction program -- primarily to reduce future costs of compliance and achieve additional environmental benefits. We use simple models to analyze aspects of proposals that would increase incentives for near-term emissions reductions. We find that the economic case for early GHG reduction credits is compelling if countries (not

companies) could bank early credits to offset future emissions. The annualized savings to the United States from spreading out abatement could reach several billion dollars. Without aggregate banking, however, such credits could generate excessive abatement and produce net economic losses. We also analyze issues that affect the economic efficiency of the credits, including asymmetric information, learning-by-doing, and fiscal impacts. Finally, we examine an early cap-and-trade program, which if properly scaled could skirt certain problems associated with early reduction credits.

PD June 2000. **TI** Comparing the Efficiency of Alternative Policies for Reducing Traffic Congestion. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/28; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 35. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D62, R41, R48. **KW** Externalities. Efficiency Effects. Congestion Taxes. Single Lane Tolls. Rail Subsidies.

AB This paper compares the efficiency of a single lane toll, a congestion tax applied uniformly across freeway lanes, a gasoline tax, and a transit fare subsidy at reducing traffic congestion. The model incorporates a variety of conditions required to reach an efficient outcome. These include conditions for the efficient allocation of travel among competing modes, travel at peak versus off-peak periods, and drivers with high and low time costs sorted onto faster and slower freeway lanes. Each policy violates some or all of the efficiency conditions. Under wide parameter scenarios, the single lane toll, gasoline tax, and transit subsidy forgo at least two thirds of the efficiency gains under an "ideal" congestion tax that varies across lanes. In contrast, the uniform congestion tax can achieve more than 90 percent of the efficiency gains, despite failing to separate out drivers with high and low time costs onto different freeway lanes.

TI Instrument Choice for Environmental Protection When Technological Innovation is Endogenous. **AU** Fischer, Carolyn; Parry, Ian W. H.; Pizer, William A.

PD February 1999. **TI** Tax Deductible Spending, Environmental Policy, and the "Double Dividend" Hypothesis. **AU** Parry, Ian W. H.; Bento, Antonio Miguel. **AA** Parry: Resources for the Future. Bento: University of Maryland. **SR** Resources for the Future Discussion Paper: 99/24; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 25. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D62, H23, H24, L51, Q28. **KW** Environmental Policy. Distortionary Taxes. Tax Deductions. Welfare Effects.

AB Studies have shown that the general equilibrium welfare effects of externality-correcting policies depend on preexisting taxes, particularly those that distort the labor market. We extend the literature by allowing for consumption goods -- medical insurance, other fringe benefits, and mortgage interest -- that are deductible from labor taxes. The initial tax system subsidizes tax-favored consumption and distorts the labor market. We find that incorporating tax-favored consumption may overturn results from earlier studies. In particular, a revenue-neutral pollution tax (or auctioned pollution permits) can produce a substantial "double dividend" by reducing both pollution and the costs of the tax system. The second dividend arises because the welfare gain from using environmental tax revenues to cut labor taxes is much larger when labor taxes also

distort the choice among consumption goods. Ignoring environmental benefits, the overall costs of a revenue-neutral pollution tax are negative in our simulations, even as the pollution reduction nears 42%.

PD August 1999. **TI** Revenue Recycling and the Welfare Effects of Road Pricing. **AU** Parry, Ian W. H.; Bento, Antonio Miguel. **AA** Parry: Resources for the Future. Bento: World Bank and University of Maryland. **SR** Resources for the Future Discussion Paper: 99/45; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 32. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** H21, H23, H24, J22, R41. **KW** Externalities. Congestion Taxes. Pre-Existing Distortions. Taxation. Welfare Effects.

AB This paper explores the interactions between taxes on work-related traffic congestion and pre-existing distortionary taxes in the labor market. A congestion tax raises the overall costs of commuting to work and discourages labor force participation at the margin, when revenues are returned in lump-sum transfers. The authors find that the resulting efficiency loss in the labor market can be larger than the Pigouvian efficiency gains from internalizing the congestion externality. In contrast, if congestion tax revenues are used to reduce labor taxes the net impact on labor supply is positive, and the efficiency gain in the labor market can raise the overall welfare gains of the congestion tax by as much as 100 percent. Recycling congestion tax revenues in public transit subsidies produces a positive, but smaller, impact on labor supply. In short, results indicate that the presence of pre-existing tax distortions, and the form of revenue recycling, can crucially affect the magnitude, and possibly even the sign, of the welfare effect of road-pricing schemes. The efficiency gains from recycling congestion tax revenues in other tax reductions can amount to several times the Pigouvian welfare gains from congestion reduction.

PD August 1999. **TI** Tax Deductions, Consumption Distortions, and the Marginal Excess Burden of Taxation. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 99/48; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 31. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** H21, H23, H43. **KW** Welfare Costs. Tax Deductions. Monte Carlo. Tax Efficiency. Excess Burden.

AB Because certain expenditures, such as mortgage interest and medical insurance, receive favorable tax treatment, labor taxes (income taxes) can produce efficiency losses: They distort the allocation of consumption, in addition to distorting the labor market. Examining the responsiveness of taxable income to changes in tax rates, Feldstein (1999) estimated that the marginal excess burden of taxation (MEB) could exceed unity when the effects of tax deductions were taken into account. I develop a disaggregated approach to estimating the MEB that decomposes welfare impacts in the market for labor and tax-favored consumption goods, and uses micro evidence on labor supply elasticities and the demand elasticity for mortgage interest and medical insurance. Using Monte Carlo simulations, I find a 68% probability that the marginal excess burden lies between .31 and .48 for government transfer spending and between .21 and .35 for public goods -- below Feldstein's but considerably higher than when tax deductions are ignored.

Pattanayak, Subhrendu

TI Benefit Transfer as Preference Calibration. **AU** Smith, V. Kerry; Van Houtven, George; Pattanayak, Subhrendu.

Pattillo, Catherine

PD 2000. **TI** Managerial Risk Attitudes and Firm Performance in Ghanaian Manufacturing: An Empirical Analysis Based on Experimental Data. **AU** Pattillo, Catherine; Soderbom, Mans. **AA** Pattillo: International Monetary Fund. Soderbom: CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/17; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 30. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** D21, D81, D84. **KW** Ghana. Manufacturing. Risk Aversion. Profit Function. Variance Function.

AB Ghanaian manufacturing firms face a highly risky environment. Firms may attempt to manage these risks by undertaking production, input, and investment strategies designed to lower profit variability. Mean-variance analysis implies, however, that these strategies involve a trade-off with lower expected profits. This paper investigates the extent to which more risk-averse managers who face high risks attempt to smooth profits at the expense of lower average profits. We use data from the Ghana Manufacturing Enterprise Survey (GMES) 1994-95, and a specialized component designed to measure managers' risk attitudes using an experimental gambling approach with real monetary payoffs. Joint estimation of profit and profit variance functions which control for unobserved heterogeneity support model predictions. Firms with more risk averse managers who face high risks have lower profit rate variability and lower mean profit rates. These mean and variance differences are economically important and statistically significant.

Paul, Anthony

TI Ancillary Benefits of Reduced Air Pollution in the U.S. from Moderate Greenhouse Gas Mitigation Policies in the Electricity Sector. **AU** Burtraw, Dallas; Krupnick, Alan; Palmer, Karen; Paul, Anthony; Toman, Michael; Bloyd, Cary.

TI Ancillary Benefits of Reduced Air Pollution in the U.S. from Moderate Greenhouse Gas Mitigation Policies in the Electricity Sector. **AU** Burtraw, Dallas; Krupnick, Alan; Palmer, Karen; Paul, Anthony; Toman, Michael; Bloyd, Cary.

Pautsch, Gregory R.

PD November 1999. **TI** Relative Efficiency of Sequestering Carbon in Agricultural Soils Through Second Best Instruments. **AU** Pautsch, Gregory R.; Babcock, Bruce A. **AA** Iowa State University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 99/90; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 28. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** Q31, Q38. **KW** Carbon. Government Policy.

AB The total expected cost of sequestering carbon in agricultural soils is estimated under different government-based and market-based policies. A possible government-based EQIP program offering a per-acre subsidy to adopt conservation tillage and a market-based carbon credit program where producers are given carbon credits to sell in an external market

are examined. It was shown that by varying the distribution of carbon credits given to producers, a market-based carbon credit program can be equivalent to any type of government-based EQIP subsidy program. The relative efficiency of programs consisting of a single subsidy or carbon credit is then discussed.

Pechlivanos, Lambros

TI Teamwork Management in an Era of Diminishing Commitment. **AU** Auriol, Emmanuelle; Friebel, Guido; Pechlivanos, Lambros.

Peek, Joe

PD March 1999. **TI** Is Bank Supervision Central to Central Banking? **AU** Peek, Joe; Rosengren, Eric S.; Tootell, Geoffrey M. B. **AA** Peek: Boston College. Rosengren and Tootell: Federal Reserve Bank of Boston. **SR** Federal Reserve Bank of Boston Working Paper: 99/07; Research Library, Federal Reserve Bank of Boston, P.O. Box 2076, Boston, MA 02106-2076. Website: www.bos.frb.org/economic/wpchro.htm. **PG** 26. **PR** no charge. **JE** E52, E58. **KW** Central Banking. Bank Supervision. Monetary Policy.

AB Recently, several central banks have lost their bank supervisory responsibilities, in part because it has not been shown that supervisory authority improves the conduct of monetary policy. This paper finds that confidential bank supervisory information could help the Board staff more accurately forecast important macroeconomic variables and is used by FOMC members to guide monetary policy. These findings suggest that the complementarity between supervisory responsibilities and monetary policy should be an important consideration when evaluating the structure of the central bank.

PD September 1999. **TI** Does the Federal Reserve Possess An Exploitable Informational Advantage? **AU** Peek, Joe; Rosengren, Eric S.; Tootell, Geoffrey M. B. **AA** Peek: Boston College. Rosengren and Tootell: Federal Reserve Bank of Boston. **SR** Federal Reserve Bank of Boston Working Paper: 99/08; Research Library, Federal Reserve Bank of Boston, P.O. Box 2076, Boston, MA 02106-2076. Website: www.bos.frb.org/economic/wpchro.htm. **PG** 25. **PR** no charge. **JE** E52, E58. **KW** Central Banking. Bank Supervision. Monetary Policy.

AB This paper provides evidence that the Federal Reserve has an informational advantage over the public that can be exploited to improve activist monetary policy. The informational advantage derives from the Fed's role as a bank supervisor, and it is shown to be of sufficient duration to be effective in guiding activist monetary policy, even in simple rational expectations models. The informational superiority does not result from the Fed having earlier access to publicly released data about the financial condition of banks. Instead, this informational advantage is generated by confidential supervisory knowledge about troubled, non-publicly traded banks. As a result, this information can remain confidential for an extended period of time because these banks do not have an incentive to fully disclose publicly the extent of their financial troubles, and, since they are not publicly traded, are not required to do so. The improvement in forecasts using this confidential information is both statistically significant and economically important, providing a potential justification for activist monetary policy.

Pemberton, Malcolm

PD September 2000. **TI** Measuring Income and Measuring Sustainability. **AU** Pemberton, Malcolm; Ulph, David. **AA** University College London. **SR** University College London Discussion Papers in Economics: 2000/03; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 17. **PR** 4 pounds or \$8.00. **JE** D91, E21, O30, P17, Q30. **KW** National Income Accounting. Sustainability. Inclusive Income. Technological Change.

AB In this paper we examine what interpretation can be placed on inclusive income, understood to be consumption plus the value of the net increase in all relevant capital stocks. We introduce the concept of instantaneously constant value income defined as the maximum amount the economy can consume at a moment of time and maintain constant the expected present value of utility of current and future generations. We argue that this income concept captures some of the concerns lying behind sustainability. Our main result is that inclusive income equals instantaneously constant value income. We show that this result holds in a very general setting, and, in particular, carries over to models incorporating technological progress when such progress can be captured by augmented stocks of knowledge. An important implication of our main result is that it gives a very simple method for deriving inclusive income, which does not involve any linearization of the Hamiltonian.

PD September 2000. **TI** Technical Progress and the Measurement of National Income. **AU** Pemberton, Malcolm; Ulph, David. **AA** University College London. **SR** University College London Discussion Papers in Economics: 2000/04; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 24. **PR** 4 pounds or \$8.00. **JE** D91, E21, O30, P17, Q30. **KW** National Income Accounting. Technological Progress. Inclusive Income.

AB This paper provides a unified approach to the analysis of national accounting when there is technical progress. The authors use a consistent concept of national income accounting -- instantaneously constant value income -- and apply it to a simple, but general, model of technical progress that embraces both endogenous and exogenous technical change. They have shown that the resulting formula for the component of inclusive income attributable to technical progress is consistent with those recently proposed by both Weitzman (1997) and by Hamilton, Atkinson and Pearce (1998). Using particular functional forms, the authors calibrate the steady state value of this term. The principal conclusions are as follows. While the contribution of technical change to inclusive income can certainly be of the order of the 50% figure proposed by Weitzman (1997), this figure is very sensitive to assumed parameter values. This conclusion does not depend on the extent to which technical progress is exogenous or endogenous. However, how much of a correction needs to be made to the conventional measures of national income to take account of technical progress does depend crucially on the extent to which technical progress is exogenous or endogenous.

Pereau, Jean-Christophe

PD January 2000. **TI** Partial and Global Cooperation with Unilateral Commitment in the Presence of Global Environmental Problems. **AU** Pereau, Jean-Christophe;

Tazdait, Tarik. **AA** Perea: University of Marne-la-Vallee and University of Littoral. Tazdait: CNRS-EHESS-CIRED and University of Marne-la-Vallee. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/09; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 23. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D74, Q28. **KW** Global Environmental Problems. Unilateral Commitment. Nash Equilibrium. Environmental Tax.

AB This paper focuses on the link between the group cooperation and the unilateral commitment behavior of some countries in the presence of global environmental problems. As we consider that this last behavior occurs when bargaining failed, we call it a pre-cautious commitment. We also show that the emergence of a non-coordinate global co-operation can result from a strategic action from the members of the coalition. The insiders of the coalition create an incentive for the non-members to reduce without co-ordination their emissions. Finally, when we introduce an environmental tax prescribed by the co-operating countries to the non-co-operating ones, co-operation becomes global and coordinated.

Pereira, Sonia Cecilia

PD February 1999. **TI** The Impact of Minimum Wages on Youth Employment in Portugal. **AA** University College London. **SR** University College London Discussion Papers in Economics: 99/03; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 50. **PR** 4 pounds or \$8.00. **JE** J19, J23, J31, J38. **KW** Minimum Wages. Youth Employment. Natural Experiments.

AB From January 1, 1987, the legal minimum wage for workers aged 18 and 19 in Portugal was updated to the full adult rate, generating a 49.3% increase between 1986 and 1987 in the legal minimum wage for this age group. This shock is used as a "natural experiment" to evaluate the impact of the minimum wage change on teenagers' employment by using a large firm-level micro data set. It is shown that by comparing the employment growth of 18-19 year-old workers with their 20-25 year-old counterparts one can identify the employment effects of the minimum wage hike. The same comparisons are done with 30-35 year-old workers. This study finds that the rise in the minimum wage significantly reduced employment. This conclusion is reinforced by evidence showing that these employment effects are concentrated in firms more likely to be affected by the change in the law.

Peri, Giovanni

TI Innovation, Demand and Knowledge Spillovers: Theory and Evidence >From European Regions. **AU** Bottazzi, Laura; Peri, Giovanni.

Perotti, Enrico C.

PD September 1999. **TI** Privatization, Political Risk and Stock Market Development. **AU** Perotti, Enrico C.; van Oijen, Pieter. **AA** Universiteit van Amsterdam. **SR** Centre for Economic Policy Research Discussion Paper: 2243; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 40. **PR** 5 pounds, \$8 or 8 euros. **JE** F30, G10. **KW** Privatization. Political Risk. Emerging Markets. Financial Development. Equity Issue.

AB This paper investigates whether privatization in emerging economies has a significant indirect effect on local stock market

development through the resolution of political risk. We argue that a sustained privatization program represents a major political test that gradually resolves uncertainty over political commitment to a market-oriented policy as well as to regulatory and private property rights. We present evidence suggesting that progress in privatization is correlated with improvements in perceived political risk and that these improvements are significantly larger in privatizing countries than in non-privatizing countries, indicating that the resolution of such risk is endogenous to the privatization process. Our analysis further shows that changes in political risk in general tend to have a strong effect on local stock market development and excess returns in emerging economies, suggesting that political risk is a priced factor. We conclude that the resolution of political risk resulting from successful privatization has been an important source for the rapid growth of stock markets in emerging economies.

Perotti, Roberto

TI Fiscal Policy, Profits and Investment. **AU** Alesina, Alberto F.; Perotti, Roberto; Schiantarelli, Fabio; Ardagna, Silvia.

Persson, Torsten

TI Political Economics and Public Finance. **AU** Tabellini, Guido; Persson, Torsten.

Pestieau, Pierre

PD July 2000. **TI** Macroeconomic Implications of Switching the Social Security Trust Fund Towards a Greater Investment in Equities. **AU** Pestieau, Pierre; Possen, Uri M. **AA** Pestieau: CORE, DELTA, and University of Liege. Possen: Cornell University. **SR** Universite Catholique de Louvain. CORE Discussion Paper: 2000/35; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voi du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 20. **PR** \$100 per year. **JE** E21, E22, H40, H55. **KW** Social Security. Equity Investment. Capital Stocks. Consumption. Publicly Provided Goods.

AB This paper shows that shifting the portfolio allocation of the social security trust fund towards more equity investment, *ceteris paribus*, reduces the aggregate capital stock as well as the average consumption level of all individuals except the poor retirees who receive an increase but at the cost of a large increase in uncertainty. If a larger capital stock is desired, reducing the supply of publicly supplied goods is the most effective tool. That change also increases the average private consumption of all the young and the wealthy retirees although it does reduce the average consumption and uncertainty of the old non-savers.

Petrungolo, Barbara

PD October 1999. **TI** Re-Employment Probabilities and Returns to Matching. **AA** London School of Economics. **SR** Centre for Economic Policy Research Discussion Paper: 2266; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 32. **PR** 5 pounds, \$8 or 8 euros. **JE** J63, J64. **KW** Hazard Functions. Returns to Matching. Labor Markets, Local.

AB The assumption of constant returns in the matching function, embodied in most bilateral search models, is crucial to ensure the uniqueness of the unemployment rate along a

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

Petrucci, Alberto

PD June 2000. **TI** Capital Subsidies Versus Labour Subsidies: A Trade-Off Between Capital and Employment? **AU** Petrucci, Alberto; Phelps, Edmund S. **AA** Petrucci: LUISS G. Carli and Univerita del Molise, Italy. Phelps: Columbia University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/32; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 30. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** E24, J32, J38. **KW** Capital Subsidy. Employment Subsidy. Structural Unemployment. Wealth Accumulation.

AB This paper examines the consequences of capital and labor subsidies for employment, capital formation and other macroeconomic variables within an OLG small open economy model of wealth accumulation. Two cases, the neoclassical-equilibrium one and the modern-equilibrium one, have been analyzed. We discover that the employment effects of the subsidies studied differ significantly, while whether the subsidy hike is financed by an increase of payroll taxation or a decrease of employment subsidization is immaterial for the qualitative effects on the macroeconomic system. In the neoclassical-equilibrium theory, a capital subsidy causes a temporary increase in hours worked which vanishes in the new long run, while an increase in labor subsidy has no aggregate effects on the macroeconomic equilibrium. The key finding of the modern-equilibrium case is the existence of a negative relationship between capital formation and employment. Capital subsidies boost investment and aggravate unemployment, while labor subsidies stimulate employment and may depress capital accumulation.

Phelps, Edmund S.

TI Capital Subsidies Versus Labour Subsidies: A Trade-Off Between Capital and Employment? **AU** Petrucci, Alberto; Phelps, Edmund S.

Phillips, Peter C. B.

TI GMM Estimation of Autoregressive Roots Near Unity with Panel Data. **AU** Moon, Hyungsik Roger; Phillips, Peter C. B.

TI Forecasting New Zealand's Real GDP. **AU** Schiff, Aaron F.; Phillips, Peter C. B.

TI Structural Change in Tail Behavior and the Asian Financial Crisis. **AU** Quintos, Carmela E.; Fan, Zhenhong; Phillips, Peter C. B.

Pindyck, Robert S.

PD January 2000. **TI** Irreversibilities and the Timing of Environmental Policy. **AA** Massachusetts Institute of Technology. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/05; Fondazione Eni Enrico Mattei, Corso Magenta

63, 20123 Milano, Italy. Website: www.feem.it. PG 31. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE H23,Q28, L51. KW Environmental Policy. Irreversibilities. Cost-Benefit Analysis. Uncertainty. Option Value. Global Warming.

AB The standard framework in which economists evaluate environmental policies is cost-benefit analysis, so policy debates usually focus on the expected flows of costs and benefits, or on the choice of discount rate. But this can be misleading when there is uncertainty over future outcomes, when there are irreversibilities, and when policy adoption can be delayed. This paper shows how two kinds of uncertainty over the future costs and benefits of reduced environmental degradation, and over the evolution of an ecosystem interact with two kinds of irreversibilities -- sunk costs associated with an environmental regulation, and "sunk benefits" of avoided environmental degradation -- to affect optimal policy timing and design.

Pisani-Ferry, Jean

TI Trade Rules and Global Governance: a Long Term Agenda and The Future of Banking in Europe. AU Jacquet, Pierre; Pisani-Ferry, Jean; Strauss-Kahn, Dominique; Schmidt, Reinhart H.

Pizer, William A.

TI How Important is Technological Innovation in Protecting the Environment? AU Parry, Ian W. H.; Pizer, William A.; Fischer, Carolyn.

TI Regulating Stock Externalities Under Uncertainty. AU Newell, Richard G.; Pizer, William A.

TI The Analysis of Randomized Experiments with Missing Data. AU Imbens, Guido W.; Pizer, William A.

TI Job Versus the Environment: Is There a Trade-Off? AU Morgenstern, Richard D.; Pizer, William A.; Shih, Jih-Shyang.

TI Instrument Choice for Environmental Protection When Technological Innovation is Endogenous. AU Fischer, Carolyn; Parry, Ian W. H.; Pizer, William A.

Polemarchakis, Heracles M.

TI Equilibrium and Arbitrage in Incomplete Asset Markets with Fixed Prices. AU Herings, Jean-Jacques; Polemarchakis, Heracles M.

TI Life-Span and the Determinacy of Equilibrium in Economies of Overlapping Generations. AU Demichelis, Stefano; Polemarchakis, Heracles M.

TI Monetary Equilibria. AU Dreze, Jacques H.; Polemarchakis, Heracles M.

Polk, Christopher

TI The Diversification Discount: Cash Flows vs. Returns. AU Lamont, Owen A.; Polk, Christopher.

Possen, Uri M.

TI Macroeconomic Implications of Switching the Social Security Trust Fund Towards a Greater Investment in Equities. AU Pestieau, Pierre; Possen, Uri M.

Poterba, James M.

TI Do After-Tax Returns Affect Mutual Fund Inflows? AU Bergstresser, Daniel; Poterba, James M.

PD October 1999. TI Taxation and Household Portfolio Composition: U.S. Evidence from the 1980's and 1990's. AU Poterba, James M.; Samwick, Andrew A. AA Poterba: MIT and NBER. Samwick: Dartmouth College and NBER. SR National Bureau of Economic Research Working Paper: 7392; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 29. PR \$5.00. JE G11, H24. KW Income Taxes. Marginal Tax Rates. Portfolio Choice. Taxation.

AB This paper explores the relationship between household marginal income tax rates, the set of assets that households own, and the portfolio shares accounted for by each of these assets. It analyzes data from the 1983, 1989, 1992, and 1995 Surveys of Consumer Finances and develops a new algorithm for imputing federal marginal tax rates to households in these surveys. The empirical findings suggest that a household's marginal tax rate has an important effect on its asset allocation decisions. The probability that a household owns tax-advantaged assets is strongly related to its tax rate on ordinary income. In addition, the amount of investment through tax-deferred accounts such as 401(k) plans and IRAs is an increasing function of the household's marginal tax rate. Holdings of corporate stock, which is taxed less heavily than interest bearing assets, and of tax-exempt bonds are also increasing in the household's marginal tax rate. Holdings of heavily taxed assets, such as corporate bonds and interest-bearing accounts, decline as a share of wealth as a household's marginal tax rate increases.

Powell, Mark

TI Implementing the Clean Development Mechanism: Lessons from U.S. Private-Sector Participation in Activities Implemented Jointly. AU Lile, Ronald; Powell, Mark; Toman, Michael A.

Prat, Andrea

TI The Value of Public Information in Monopoly. AU Ottaviani, Marco; Prat, Andrea.

Preston, Ian

PD March 2000. TI Racial Discrimination in English Football. AU Preston, Ian; Szymanski, Stefan. AA Preston: University College London and IFS. Szymanski: Imperial College Management School. SR University College London Discussion Papers in Economics: 2000/01; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. PG 15. PR 4 pounds or \$8.00. JE J15, J71. KW Discrimination. Race. Football.

AB This paper examines data on the racial composition and financial and sporting performance of professional English soccer teams between 1974 and 1993. In an earlier paper, Szymanski showed that teams with an above average proportion of black players would tend to perform better on average than would have been expected given the aggregate wage bills of these clubs. Since players are more or less freely traded in soccer this presents strong market-based evidence of discrimination. The present paper explores the source of such

discrimination. In particular the authors are concerned to test the hypothesis that discrimination is attributable to the fans rather than the owners. If fans were racially prejudiced then the owners of a team might expect to generate a smaller marginal revenue product from a black player compared to an equally skilled white player. The authors assess the presence of fan discrimination by examining relationships between attendance, revenues, performance and the proportion of black players on the team. They find at best weak evidence that the discrimination against black players has its source in fan discrimination.

TI Attitudes to Ethnic Minorities, Ethnic Context and Location Decisions. **AU** Dustmann, Christian; Preston, Ian.

PD January 1999. **TI** Batting Strategy in Limited Overs Cricket. **AU** Preston, Ian; Thomas, Jonathan. **AA** University College London. **SR** University College London Discussion Papers in Economics: 99/01; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 14. **PR** 4 pounds or \$8.00. **JE** C41, C61. **KW** Cricket. Batting Strategy. Dynamic Programming. Survival Analysis.

AB The paper attempts to understand batting strategies employed in limited overs cricket games. The question of optimum batting strategy is posed in a simplified dynamic-programming representation. We demonstrate that optimum strategies may be expected to differ fundamentally in the first and second innings, typically involving an increasing run rate when setting a target but a run rate which may decline over the course of an inning when chasing one. Data on English county-level limited overs games are used to estimate a model of actual batting behavior. The statistical framework takes the form of an interesting variant on conventional survival analysis models.

Proulx, Chris

TI Does Minimax Work? An Experimental Study. **AU** Binmore, Ken; Swierzbinski, Joe; Proulx, Chris.

Prusa, Thomas J.

PD October 1999. **TI** On the Spread and Impact of Antidumping. **AA** Rutgers University. **SR** National Bureau of Economic Research Working Paper: 7404; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 19. **PR** \$5.00. **JE** F13, F41. **KW** Antidumping. Commercial Policy. International Trade. Imports. Open Economy.

AB This paper documents two key costs of AD protection. First, once AD has been adopted, countries often have a difficult time restraining its use. In recent years "new" users have accounted for half of the overall world total. Many of the heaviest AD users are countries who did not even have an AD statute a decade ago. Second, I will show that on average AD duties cause the value of imports to fall by 30-50%. I find that trade falls by almost as much for settled cases as those that result in duties. Interestingly, I also find that even for those cases that are rejected imports fall. The spread and impact of AD protection most surely implies that AD will continue to be a key negotiating item in the next WTO round.

Puga, Diego

PD October 1999. **TI** Unemployment Clusters Across

European Regions and Countries. **AU** Puga, Diego; Overman, Henry G. **AA** Puga: University of Toronto. Overman: London School of Economics. **SR** Centre for Economic Policy Research Discussion Paper: 2255; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 48. **PR** 5 pounds, \$8 or 8 euros. **JE** E24, F15, R12. **KW** Unemployment. European Regions. Distribution Dynamics.

AB European regions have experienced a polarization of their unemployment rates between 1986 and 1996, as regions with intermediate rates have moved towards either extreme. This process has been driven by changes in regional employment, only partly offset by labor force changes. Regions' outcomes have closely followed those of neighboring regions. This is only weakly explained by regions being part of the same Member State, having a similar skill composition, or broad sectoral specialization. Even more surprisingly, foreign neighbors matter as much as domestic neighbors. All of this suggests a reorganization of economic activities with increasing disregard for national borders.

PD October 1999. **TI** Diversity and Specialization in Cities: Why, Where and When Does It Matter? **AU** Puga, Diego; Duranton, Gilles. **AA** Puga: University of Toronto. Duranton: London School of Economics and CEPR (Centre for Economic Policy Research). **SR** Centre for Economic Policy Research Discussion Paper: 2256; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 36. **PR** 5 pounds, \$8 or 8 euros. **JE** D83, O31, R30. **KW** Cities. Diversity. Specialization.

AB Why are some cities specialized and others diversified? What are the advantages and disadvantages of urban specialization and diversity? To what extent does the structure of cities, and the activities of firms and people in them, change over time? How does the sectoral composition of cities influence their evolution? By distilling some key stylized facts from the empirical literature on cities and the composition of their activities, these and related questions are answered. The paper also reviews different theories looking at such issues, and studies the extent to which these theories contribute to the understanding of the empirical regularities.

Puhani, Patrick A.

PD September 1999. **TI** Public Training and Outflows from Unemployment: An Augmented Matching Function Approach on Polish Regional Data. **AA** Universitat St.Gallen and Massachusetts Institute of Technology. **SR** Centre for Economic Policy Research Discussion Paper: 2244; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 52. **PR** 5 pounds, \$8 or 8 euros. **JE** E24, J64. **KW** Training. Evaluation. Augmented Matching Function.

AB This paper analyzes Polish active labor market policy (ALMP) training programs from a macroeconomic (regional) point of view. The effects of training programs on the outflows from unemployment and the effects of all ALMP programs on the outflows from employment (to identify displacement effects) are estimated. The variety of specifications presented is revealing. In contrast to other studies on Poland, this shows that it can make a difference to the estimates whether current ALMP expenditure is excluded from the set of regressors to reduce the endogeneity problem; whether lagged dependent variables are included to take account of the dynamics and; whether fixed or random effects models are estimated. The empirical evidence

gives some tentative support to the view that public training programs can be used to reduce unemployment.

Queralt, Magaly

TI Child Care and the Welfare to Work Transition. AU Lemke, Robert J.; Witte, Ann Dryden; Queralt, Magaly; Witt, Robert.

Quintos, Carmela E.

PD November 2000. TI Structural Change in Tail Behavior and the Asian Financial Crisis. AU Quintos, Carmela E.; Fan, Zhenhong; Phillips, Peter C. B. AA Quintos and Fan: New York University. Phillips: Yale University. SR Yale Cowles Foundation Discussion Paper: 1283; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. PG 38. PR no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. JE C12, C22, F30, G15. KW Extreme Value Theory. Hill Estimator. Structural Change. Tail Index Estimation. Financial Crises.

AB This paper explores tests of the hypothesis that the tail thickness of a distribution is constant over time. Using Hill's conditional maximum likelihood estimator for the tail index of a distribution, tests of tail shape constancy are constructed that allow for an unknown breakpoint. The recursive test is shown to be inconsistent in one direction, and only a one-sided test is recommended. Specifically, the test can be used when the alternative hypothesis is that the tail index decreases over time. A rolling and sequential version of the test is consistent in both directions. The methods are illustrated on recent stock price data for Thailand, Malaysia and Indonesia. The period covers the recent Asian financial crisis and enables us to assess whether breakpoints in domestic asset return distributions are related to known changes in institutional arrangements in the foreign currency markets of these countries.

Quisumbing, Agnes R.

TI Control and Ownership of Assets Within Rural Ethiopian Households. AU Fafchamps, Marcel; Quisumbing, Agnes R.

TI Assets at Marriage in Rural Ethiopia. AU Fafchamps, Marcel; Quisumbing, Agnes R.

Rajan, Raghuram G.

PD February 2000. TI The Firm as a Dedicated Hierarchy: A Theory of the Origin and Growth of Firms. AU Rajan, Raghuram G.; Zingales, Luigi. AA Rajan: University of Chicago and National Bureau of Economic Research. Zingales: University of Chicago, National Bureau of Economic Research, and Centre for Economic Policy Research. SR National Bureau of Economic Research Working Paper: 7546; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. PG 47. PR \$10.00 per copy (plus \$10.00 per order for shipping outside US). JE D23. KW Organizational Behavior.

AB A fundamental problem entrepreneurs face in the formative stages of their businesses is how to provide incentives for employees to protect, rather than steal, the source of organizational rents. We study how the entrepreneur's response to this problem will determine the organization's internal structure, growth, and its eventual size. In particular, our model suggests large, steep hierarchies will predominate in

physical capital intensive industries, and these will typically have seniority-based promotion policies. By contrast, flat hierarchies will be seen in human capital intensive industries. These will have up-or-out promotion systems, where experienced managers either become owners or are fired. Furthermore, flat hierarchies will have more distinctive technologies or cultures than steep hierarchies. The model points to some essential differences between organized hierarchies and markets.

Ramieri, Emiliano

PD April 2000. TI An Overview of the Vulnerability of Venice to the Impacts of Climate Change and Sea Level Rise. AA Fondazione Eni Enrico Mattei. SR Fondazione Eni Enrico Mattei Note di Lavoro: 00/22; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 27. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE Q25, Q32. KW Venice. Climate Change Impact. Sea Level Rise. Coastal Zones. Flood Risk. Coastal Erosion. Wetland Loss. Salt Marshes. Vulnerability Assessment.

AB The scientific community agrees on the fact that climate change and consequent impacts will assume specific regional and local characteristics with some regions of the world more vulnerable than others. In this perspective the assessment of a system's vulnerability must be performed at a regional or local scale. The lagoon of Venice can be considered a very vulnerable system, because of its characteristics, its artistic, cultural and natural value, and the existence of relevant impacts (erosion, loss of wetlands, temporary flooding, variation of ecological parameters, saltwater penetration, pollution and its gradual transformation into a marine bay) which already affect the system and which could be intensified by change in climatic conditions and, in particular, increase in the sea level. On the basis of the few existing studies, the present paper attempts to present an overview of the Venice lagoon's vulnerability to climate change and sea level rise, with the conclusion that in spite of an elevated fragility of the system, a detailed vulnerability assessment has not yet been performed. The paper also attempts to identify some relevant methodological points which might constitute the basis for such a study.

Rangel, Antonio

TI A Graphical Analysis of Some Basic Results in Social Choice. AU Cantillon, Estelle; Rangel, Antonio.

Razin, Assaf

PD October 1999. TI Excessive FDI Flows Under Asymmetric Information. AU Razin, Assaf; Sadka, Efraim; Yuen, Chi-Wa. AA Razin: Tel Aviv University and NBER. Sadka: Tel Aviv University. Yuen: University of Hong Kong. SR National Bureau of Economic Research Working Paper: 7400; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 20. PR \$5.00. JE D82, F13, F21, F23, G15. KW Foreign Direct Investment. Asymmetric Information. Commercial Policy. Multinational Firms. Stock Markets.

AB In Razin, Sadka and Yuen (1998, 1999a), the authors explored the policy implications of the home-bias in international portfolio investment as a result of asymmetric information problems. However, FDI is different from foreign portfolio investment, concerning relevant information about

domestic firms. Through the stationing of managers from the headquarters of multinational firms in the foreign direct establishments in the destination countries under their control, FDIors can monitor closely the operation of such establishments, thus circumventing these informational problems. Furthermore, FDI investors not only have an informational advantage over foreign portfolio investors, but they are also more informed than domestic savers. Being "insiders", the FDIors can "overcharge" the unformed domestic savers, the "outsiders", when multinational subsidiaries' shares are traded in the domestic stock market. Anticipating future domestic stock market trade opportunities, in advance, foreign investment becomes excessive. However, unlike the home-bias informational problem excessive FDI flows under the insider-outsider informational problem call for a non-tax corrective policy. The corrective policy tool is quantity restrictions on FDI.

Rebelo, Sergio T.

TI Resuscitating Real Business Cycles. **AU** King, Robert G.; Rebelo, Sergio T.

TI On the Fundamentals of Self-Fulfilling Speculative Attacks. **AU** Burnside, Craig; Eichenbaum, Martin; Rebelo, Sergio T.

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

Recanatini, Francesca

PD April 2000. **TI** Disorganisation or Self-Organisation? **AU** Recanatini, Francesca; Ryterman, Randi. **AA** The World Bank. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/26; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 35. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D23, D71, L11, O17, P21. **KW** Co-ordination Problems. Transition. Alternative Institutions.

AB The transition from plan to market provides a rare opportunity for insight into the endogenous development of economic institutions. Economic activities during the Soviet regime were co-ordinated by a central authority. These co-ordinating mechanisms were disrupted during the transition period, leading to an increase in the transaction costs for firms. Blanchard and Kremer (1997), among others, emphasize the negative impact of this "disorganization" on output behavior at the beginning of transition. This paper begins where the former works end by examining one of the key institutions that have emerged spontaneously in response to the challenges of transition: business associations. Its main contribution is to provide empirical evidence that institutions that help co-ordinate production and trade spontaneously emerge in an environment characterized by widespread "disorganization". Using a largely unexplored, firm-level data set, we document the emergence of business associations at the beginning of transition and provide evidence that these new co-ordinating institutions mitigated the initial output decline. Building on the growing literature on transaction costs and complexity, we interpret the emergence of these informal institutions as the firms' rational response to co-ordinate activities in a decentralized economy.

Reding, Paul

TI Prospective Aid and Indebtedness Relief: A Proposal. **AU** Berlage, Lode; Cassimon, Danny; Dreze, Jacques H.; Reding, Paul.

Reiffen, David

TI How do Retailers Adjust Prices: Evidence From Store-Level Data. **AU** Hosken, Daniel; Matsa, David; Reiffen, David.

PD April 2001. **TI** Targeted Consumer Information and Prices: The Private and Social Gains to Matching Consumer With Products. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 238; 600 Pennsylvania Avenue, NW, Washington, DC 20580. Website: bperson@ftc.gov. **PG** 32. **PR** no charge. **JE** D82, D83, L15, L21. **KW** Information. Matching. Product Differentiation.

AB It is well known that product differentiation increases both prices and profits, other things equal. What is less well understood is how the distribution of consumer preferences affects firms' incentives to differentiate their products. This paper focuses on the incentive of firms to reveal truthful information about product attributes. Because consumers' preferences differ, the revelation of this information differentiates products. The profitability of inducing this differentiation is shown to be related to three aspects of the information: the size of the "targeted" group (i.e., the group who finds these attributes desirable), the magnitude of the perceived change in attributes induced by the information, and whether the information is "symmetric." In particular, I show that the profits associated with information increase more than proportionately with the size of the targeted group. This implies that information will tend to be provided for large groups, even if there are no economies of scale in producing that information. The analysis also shows that in some circumstances, the revelation of asymmetric information can actually reduce the firm's profit.

Renstrom, Thomas I.

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

Rey, Helene

TI Financial Super-Markets: Size Matters for Asset Trade. **AU** Martin, Philippe; Rey, Helene.

Richards, Anthony

TI Bond Restructuring and Moral Hazard: Are Collective Action Clauses Costly? **AU** Becker, Torbjorn; Richards, Anthony; Thaicharoen, Yungyong.

Rickman, Neil

TI Delegation and the Ratchet Effect: Should Populations Be Pro- Industry? **AU** Currie, David; Levine, Paul L.; Rickman, Neil.

Rietveld, Piet

PD January 2000. **TI** Joint Costs in Network Services: the Two-Way Problem in the Case of Unbalanced Transport Markets. **AU** Rietveld, Piet; Roson, Roberto. **AA** Rietveld: Vrije Universiteit. Roson: Universita Ca'

Foscari. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/04; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 19. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** L13, D43. **KW** Joint Costs. Transport Markets.

AB Markets for transport are often characterized by unequal demand in both directions: every morning during peak hours the trains are crowded while moving towards the direction of large cities, whereas they may be almost empty in the other direction. In this paper we discuss the implications of these imbalances for price setting of transport firms. Two regimes can be distinguished: one where -- owing to price discrimination -- the flows are equal, and one where unequal flows are the result. We find that in the case of substantial joint costs, the introduction of price discrimination not only leads to an increase of profits, but also to positive effects on consumer surplus. This result differs from the standard result in the literature on industrial economics. The standard result purports that with linear demand functions price discrimination has a negative impact on the welfare of the average consumer and that this negative impact dominates the positive effect on profits of the producer.

Robinson, James A.

TI A Theory of Political Transitions. **AU** Acemoglu, Daron; Robinson, James A.

TI Democratization or Repression? **AU** Acemoglu, Daron; Robinson, James A.

Rodrik, Dani

PD February 2000. **TI** Institutions for High-Quality Growth: What They Are and How to Acquire Them. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7540; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 34. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** O10. **KW** Democracy. Economic Development.

AB This paper opens with a discussion of the types of institutions that allow markets to perform adequately. While we can identify in broad terms what these are, there is no unique mapping between markets and the non-market institutions that underpin them. The paper emphasizes the importance of "local knowledge," and argues that a strategy of institution building must not over-emphasize best-practice "blueprints" at the expense of experimentation. Participatory political systems are the most effective ones for processing and aggregating local knowledge. Democracy is a meta-institution for building good institutions. A range indicates that participatory democracies enable higher-quality growth.

PD September 1999. **TI** Short-Term Capital Flows. **AU** Rodrik, Dani; Velasco, Andres. **AA** Rodrik: Harvard University and NBER. Velasco: New York University and NBER. **SR** National Bureau of Economic Research Working Paper: 7364; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 28. **PR** \$5.00. **JE** E44, E50, F32, F34, F41. **KW** Capital Flows. Financial Crises. Illiquidity. Debt. Monetary Policy.

AB We provide a conceptual and empirical framework for

evaluating the effects of short-term capital flows. A simple model of the joint determination of the maturity and cost of external borrowing highlights the role played by self-fulfilling crises. The model also specifies the circumstances under which short-term debt accumulation is socially excessive. The empirical analysis shows that the short-term debt to reserves ratio is a robust predictor of financial crises, and that greater short-term exposure is associated with more severe crises when capital flows reverse. Higher levels of M2/GDP and per-capita income are associated with shorter-term maturities of external debt. The level of international trade does not seem to have any relationship with levels of short-term indebtedness, which suggests that trade credit plays an insignificant role in driving short-term capital flows. Our policy analysis focuses on ways in which potential illiquidity can be avoided.

Roell, Ailsa A.

PD October 1999. **TI** Imperfect Market Monitoring and SOES Trading. **AU** Roell, Ailsa A.; Foucault, Thierry; Sandas, Patrik AA. Roell: London School of Economics. Foucault: HEC (Ecole des Hautes Etudes Commerciales de Montreal) School of Management. Sandas: Wharton School. **SR** Centre for Economic Policy Research Discussion Paper: 2265; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 64. **PR** 5 pounds, \$8 or 8 euros. **JE** G10, G14, G24, L13. **KW** Monitoring. Bid-Ask Spread. Automatic Execution. SOES.

AB This paper develops a model of price formation in a dealership market where monitoring of the information flow requires costly effort. The result is imperfect monitoring, which creates profit opportunities for speculators, who do not act as dealers but simply monitor the information flow and quote updates in order to pick off "stale quotes". Externalities associated with monitoring can help to sustain non-competitive spreads. This shows that protecting dealers against the execution of stale quotes can result in larger spreads and be detrimental to price discovery due to externalities in monitoring. A reduction in the minimum quoted depth will reduce the spread and speculators' trading frequency. This analysis is relevant for the Small Order Execution System (SOES) debate given that the behavior of speculators in the model is very similar to the alleged behavior of the real world SOES "bandits".

Rosenberg, Dinah

PD April 2000. **TI** Blackwell Optimality in Markov Decision Processes with Partial Observation. **AU** Rosenberg, Dinah; Solan, Eilon; Vieille, Nicolas. **AA** Rosenberg: Universite Paris Nord. Solan: Northwestern University. Vieille: Universite Montesquieu-Bordeaux. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1292; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 16. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C73, D80. **KW** Markov Decision Processes. Stochastic Games. Blackwell Optimality. Partial Observation.

AB We prove the existence of Blackwell E-optimal strategies in finite Markov Decision Processes with partial observation.

Rosengren, Eric S.

TI Is Bank Supervision Central to Central Banking? **AU** Peek, Joe; Rosengren, Eric S.; Tootell, Geoffrey M. B.

TI Does the Federal Reserve Possess An Exploitable Informational Advantage? **AU** Peek, Joe; Rosengren, Eric S.; Tootell, Geoffrey M. B.

Roson, Roberto

TI Joint Costs in Network Services: the Two-Way Problem in the Case of Unbalanced Transport Markets. **AU** Rietveld, Piet; Roson, Roberto.

Rostagno, Massimo V.

TI Redistribution Through Public Employment: The Case of Italy. **AU** Alesina, Alberto F.; Danninger, Stephen; Rostagno, Massimo V.

Rottier, Stephane

TI Agenda Control in Coalition Formation. **AU** Bloch, Francis; Rottier, Stephane.

Rubio, Santiago J.

PD April 2000. **TI** Sustainable Growth and Environmental Policies. **AU** Rubio, Santiago J.; Aznar, Juana. **AA** University of Valencia, Spain. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/25; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 28. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** H23, O41, Q28. **KW** Sustainable Growth. External Effects. Pigouvian Taxes. Emission Standards.

AB A model of ecologically sustainable endogenous growth is presented, in which environmental quality has a positive influence on individual welfare and on the productivity of capital. The effect of different environmental policies on the long-run growth of the economy is studied in the framework of this model. The results establish that an optimal policy which taxes production and subsidizes pollution abatement has a favorable effect on environmental quality, and could increase the growth rate if the positive external effects of the environment on the productivity are important. Furthermore, it is shown that this kind of environmental policy is neutral in budgetary terms, i.e. tax receipts are equal to subsidies. Finally, it is demonstrated that a policy based on emission control will only have a positive effect on the growth rate if the initial level of environmental quality is sufficiently low.

Russo, Giuseppe

PD October 2000. **TI** Institutional Rigidities and Employment Rigidity in the Italian Large Industrial Firms. **AU** Russo, Giuseppe; Veredas, David. **AA** Russo: CELPE and DELTA. Veredas: CORE. **SR** Universite Catholique de Louvain, CORE Discussion Paper: 2000/48; Center for Operations Research and Econometrics, Universite Catholique de Louvain, 34 Voie du Roman Pays, 1348 Louvain-la-Neuve, Belgium. Website: www.core.ucl.ac.be/dp.html. **PG** 24. **PR** \$100 per year. **JE** C10, C32, J23, J58, L23. **KW** Labor Markets. Working Hours. Labor Demand. Employment.

AB Many indicators (OECD 1994) show that the Italian labor market is characterized by a strong pro-workers and pro-unions legislation. This is usually interpreted as a high degree of

rigidity. It is known that, in response to shocks, firms in rigid labor markets tend to trade-off workers adjustment and individual working hours adjustment (Abraham-Houseman (1994)). The authors analyze this trade-off for Italian large industrial firms, using the Kalman filter to get the impulse-response functions of employment and working hours to permanent and temporary shocks. They find that since the early 1980s the terms of the trade-off have changed, and employment has become more responsive to shocks. After the pro-workers "institutional push" of the 1970s, firms seem to have circumvented the regulation through a process of capital/labor substitution that has allowed them to re-form their profit margins and to minimize labor input. Institutions have tried to provide incentives for new hirings to reduce the bias in favor of workers. Consequently, a deregulation process started in 1983-84 is changing the Italian labor market. Nonetheless, deregulation per se is unlikely to cause new hirings in an environment where labor input has been minimized.

Ryterman, Randi

TI Disorganisation or Self-Organisation? **AU** Recanatini, Francesca; Ryterman, Randi.

Rzakhanov, Zaur

TI Fertility, Migration, and Altruism. **AU** Berman, Eli; Rzakhanov, Zaur.

Rzepkowski, Bronka

PD January 2001. **TI** Pouvoir predictif de la volatilité implicite dans le prix des options de change (Predictive Power of Volatility Implied in Currency Option Quotes). **AA** CEPII. **SR** CEPII Working Paper: 2001/01; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 29. **PR** no charge. **JE** C22, F30, G14. **KW** Efficiency. Implied Volatility. Options. GARCH. Exponential GARCH.

AB Derivative markets have experienced a huge expansion over the last decade. These markets provide specific information revealing the expectations of market participants. One interesting point is related to the predictive power of these instruments. One of the evolution of the last past years was the development of the over-the-counter options market. Unlike Exchange Traded options, OTC options are quoted in implied volatility. The main part of empirical researches that aim at measuring the predictive power of the implied volatility use Exchange Traded options. The data used in this paper come from the OTC market and do not rely on a specific valuation formula. The object is to determine if the one-month at-the-money implied volatility on the dollar/yen and on several European currency of the ERM is an efficient and unbiased predictor of the future volatility over the period July 1995 to March 1998. The predictive performance is compared to that of forecasts resulting from time series models. The latter may be a simple or weighted historical volatility or may come from the estimation of econometric models such as GARCH (generalized autoregressive conditional Heteroscedasticity) or exponential GARCH.

PD March 2001. **TI** Heterogeneous Expectations, Currency Options and the Euro/Dollar Exchange Rate. **AA** CEPII. **SR** CEPII Working Paper: 2001/03; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website:

www.cepii.fr. **PG** 22. **PR** no charge. **JE** E42, E58, F41. **KW** Contagion. Probability Density Function. Heterogeneous Expectations.

AB An exchange rate model with heterogeneous expectations is developed in which agents are subject to mutual mimetic contagion in their portfolio decisions. Two alternative sources of heterogeneity are tested in order to explain the short-term dynamics of the euro/dollar since January 1999. Information conveyed by over-the-counter currency options allows the time-varying proportions of each category of agents to be inferred, as well as their respective exchange rate expectations and standard deviations. The proportion of optimistic agents in the evolution of the euro and the proportion of confident agents in their exchange rate anticipations induce portfolio reallocations, which generate euro/dollar forecasts.

Sadka, Efraim

TI Excessive FDI Flows Under Asymmetric Information. **AU** Razin, Assaf; Sadka, Efraim; Yuen, Chi-Wa.

Saez, Emmanuel

PD September 1999. **TI** Do Taxpayers Bunch at Kink Points? **AA** Harvard University and NBER. **SR** National Bureau of Economic Research Working Paper: 7366; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** H24, H31. **KW** Taxation. Income Taxes. Bunching. Fiscal Policy.

AB This paper investigates whether taxpayers bunch at the kink points of the US income tax schedule (i.e. where marginal rates jump) using tax returns data. Clear evidence of bunching is found only at the first kink point (where marginal rates jump from 0 to 15%). Evidence for other kink points is weak or null. Evidence of bunching is stronger for itemizers than for non-itemizers. Theoretical models of behavioral responses to taxation show that bunching is proportional to the compensated elasticity of income with respect to tax rates. These models are used to perform simulations of bunching and calibrate the key parameters (the behavioral elasticity and the extent to which taxpayers control their income) to the empirical income distributions. Except for low income earners, the behavioral elasticity consistent with the empirical results is small.

PD September 1999. **TI** The Effect of Marginal Tax Rates on Income: A Panel Study of "Bracket Creep". **AA** Harvard University and NBER. **SR** National Bureau of Economic Research Working Paper: 7367; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** D31, H24, H31, J22. **KW** Taxation. Income Taxes. Bracket Creep. Labor Supply. Income Distribution.

AB This paper uses a panel of individual tax returns and the "bracket creep" as source of tax rate variation to construct instrumental variables estimates of the sensitivity of income to changes in tax rates. From 1979 to 1981, the US income tax schedule was fixed in nominal terms while inflation was high (around 10%). This produced a real change in tax rate schedules. Taxpayers near the top-end of a tax bracket were more likely to creep to a higher bracket and thus experience a rise in marginal rates the following year than the other taxpayers. Compensated elasticities can be estimated by comparing the differences in changes in income between taxpayers close to the top-end of a tax bracket to the other taxpayers. These estimates, based on comparisons between very

similar groups, are robust to underlying changes in the income distribution, such as a rise in inequality. The elasticities found are higher than those derived in labor supply studies but smaller than those found previously with the same kind of tax returns data.

Salanie, Bernard

TI Breaking Down Married Female Non-Employment in France. **AU** Laroque, Guy; Salanie, Bernard.

Samwick, Andrew A.

TI Taxation and Household Portfolio Composition: U.S. Evidence from the 1980's and 1990's. **AU** Poterba, James M.; Samwick, Andrew A.

Sanchirico, James N.

PD October 2000. **TI** Dynamics of Spatial Exploitation: A Metapopulation Approach. **AU** Sanchirico, James N.; Wilen, James E. **AA** Sanchirico: Resources for the Future. Wilen: University of California, Davis. **SR** Resources for the Future Discussion Paper: 00/25R; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 26. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** Q22, R12, R19. **KW** Renewable Resources. Bioeconomics. Spatial Modeling. Metapopulation. Resource Exploitation.

AB We present a bioeconomic model of a harvesting industry operating over a heterogeneous environment comprised of discrete biological populations interconnected by dispersal processes. The model generalizes the H. S. Gordon (1954)/V. Smith (1968) model of open-access rent dissipation by accounting for intertemporal and spatial "Ricardian" patterns of exploitation. This model yields a simple, but insightful, framework from which one can investigate factors that contribute to the evolution of resource exploitation patterns over space and time. For example, we find that exploitation patterns are driven by biological and fleet dispersal and biological and economic heterogeneity. We conclude that one cannot really understand the biological processes operating in an exploited system without knowing as much about the harvesting system as about the biological system.

PD November 2000. **TI** Marine Protected Areas as Fishery Policy: A Discussion of Potential Costs and Benefits. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/23; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 16. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D61, Q22, Q28. **KW** Renewable Resources. Fisheries. Marine Protected Areas. No-Take Zones. Environmental Policy.

AB Marine protected areas (MPAs) are currently receiving considerable attention as a "new" tool to control overexploitation. Many advocates argue that MPAs will provide a plethora of benefits ranging from improved habitat to higher fish stocks with little costs. Fishermen argue, not surprisingly, that the costs resulting from closing areas could be significant and need to be considered in the debate. In this paper, a set of biological, industry, and management hypotheses drawn from the literature analyzing the effects of MPAs are discussed. In doing so, a framework is presented that can be used to assess the expected returns to society from investing in MPAs.

PD December 1998. **TI** Marine Reserves: Is There a Free Lunch? **AU** Sanchirico, James N.; Wilen, James E. **AA** Sanchirico: Resources for the Future. Wilen: University of California, Davis. **SR** Resources for the Future Discussion Paper: 99/09; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 27. **PR** Foreign: \$15.00 Air Mail: \$8.00 Surface Mail: Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** C62, Q22, R10. **KW** Marine Reserves. Spatial Models. Intertemporal Models. Bioeconomics. Fisheries.

AB This paper employs a spatial and intertemporal model of renewable resource exploitation to investigate the effects of marine reserve creation. The model combines the H. S. Gordon/Vernon Smith hypothesis of a rent dissipation process with Ricardian notions that resources are exploited across space in a pattern dependent upon relative profitabilities. The metapopulation model employed here incorporates modern biological ideas that stress patch heterogeneity, linkages, and dispersal processes between patches. The spatial bioeconomic model is then used to simulate the effects of reserve creation under various ecological structures. We find, under certain parameter configurations and ecological linkages, that there is potential for a "double-dividend" where both aggregate biomass and harvest increase after an area of the fishery is set aside and protected from exploitation.

Sandas, Patrik

TI Imperfect Market Monitoring and SOES Trading. **AU** Roell, Ailsa A.; Foucault, Thierry; Sandas, Patrik

Sanders, Seth G.

TI Teenage Childbearing and Its Life Cycle Consequences: Exploiting a Natural Experiment. **AU** Hotz, V. Joseph; Williams McElroy, Susan; Sanders, Seth G.

Sandonis, Joel

TI To Merge or to License: Implications for Competition Policy. **AU** Fauli-Oller, Ramon; Sandonis, Joel.

Sarin, Rajiv

PD August 1999. **TI** Predicting How People Play Games: A Simple Dynamic Model of Choice. **AU** Sarin, Rajiv; Vahid, Farshid. **AA** Sarin: Texas A & M University. Vahid: Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Paper: 99/12; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/. **PG** 19. **PR** no charge. **JE** C44, C72, C73, D82. **KW** Payoff Assessments. Unique Mixed Strategy. Reinforcement Learning.

AB We use the model developed in Sarin and Vahid (1999, GEB) to explain the experiments reported in Erev and Roth, (1998, AER). The model supposes that players maximize subject to their "beliefs" which are non-probabilistic and scalar-valued. They are intended to describe the payoffs the players subjectively assess they will obtain from a strategy. In an earlier paper (Sarin and Vahid (1997)) we showed that the model predicted behavior in repeated coordination games remarkably well, and better than equilibrium theory or reinforcement learning models. In this paper we show that the same one-parameter model can also explain behavior in games with a unique mixed strategy Nash equilibrium better than alternative models. Hence, we obtain further support for the

simple dynamic model.

Sarr, Abdourahmane

PD June 2001. **TI** Benefits of Compliance with Securities Listing Standards: Evidence from the Depository Receipt Market. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/79; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 17. **PR** \$10.00. **JE** C23, F21, G15. **KW** Standards Implementation. Foreign Equity Investment. Regression Analysis.

AB The paper finds that costs of implementing stringent securities listing standards may exceed benefits. Depository receipts, a growing source of international equity financing, differ in types by the reporting and disclosure standards issuing firms are required to meet. For lower levels of compliance, results show that factors associated with the stage of economic development of the issuing firm's country account for the lower levels of capital raised. Incurring reporting costs to comply with higher standards may thus be inefficient. In contrast, firms choosing to meet higher reporting and disclosure standards do so because the information revealed would have a positive effect on capital raised.

Sartzetakis, Eftichios Sophocles

PD December 1999. **TI** On the Efficiency of Competitive Markets for Input Quotas: The Case of Emission Permit Trading. **AA** University College of the Cariboo. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 99/93; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 21. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D43, D45, D73. **KW** Competitive Quota Trading. Trading of Input Quotas. Oligopolistic Product Markets. Economic Efficiency.

AB It is typical for economists and policy makers alike to presume that competitive markets allocate input licenses efficiently. This paper demonstrates that competition in the licenses market cannot assure efficiency when the product market is oligopolistic. We develop a model to provide the conditions under which a bureaucratic mechanism is welfare superior to a marketable input licenses system. Price taking behavior in the licenses market ensures transfer of licenses to the less efficient firm which becomes more aggressive in the product market. A higher than the welfare maximizing number of licenses are traded. When the input and final output technologies are positively correlated, competitive license trading may result in lower output and welfare.

Savelsbergh, Martin W. P.

TI Solving Multi-Item Capacitated Lot-Sizing Problems with Setup Times by Branch-and-Cut. **AU** Miller, Andrew J.; Nemhauser, George L.; Savelsbergh, Martin W. P.

Scandizzo, Stefania

PD June 2001. **TI** Intellectual Property Rights and International R&D Competition. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/81; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 19. **PR** \$10.00. **JE** F12, O31, O34. **KW** Intellectual Property Rights. Innovation. Imitation. Time Inconsistency. **AB** This paper examines a country's incentives for

intellectual property rights (IPR) protection in a global trading environment. There is a time inconsistency problem intrinsic to IPR protection: ex ante strong protection is warranted to promote innovation, but once discovery takes place there is an incentive to lower protection. The sub-optimal but time consistent policy involves an insufficient level of protection and, therefore, of innovation. In more technologically advanced economies reputational considerations may be sufficient to maintain strong protection. Otherwise a commitment mechanism, such as participation in the World Trade Organization, or, more controversially, some form of bilateral punishment, may be used.

Scarpa, Carlo

TI Why do Governments Sell Privatised Companies Abroad? **AU** Bortolotti, Bernardo; Fantini, Marcella; Scarpa, Carlo.

TI Non-Intrinsic Common Agency. **AU** Calzolari, Giacomo; Scarpa, Carlo.

TI Minimum Quality Standards and Predatory Behaviour. **AU** Lambertini, Luca; Scarpa, Carlo.

Scarpa, Riccardo

TI Estimating the Benefits of Traffic Calming on Through Routes: A Choice Experiment Approach. **AU** Garrod, Guy D.; Scarpa, Riccardo; Willis, Ken G.

Scharf, Kimberley Ann

TI The New Federalism: Distributional Conflict, Voluntarism and Segregation. **AU** Horstmann, Ignatius J.; Scharf, Kimberley Ann.

Schiantarelli, Fabio

TI Fiscal Policy, Profits and Investment. **AU** Alesina, Alberto F.; Perotti, Roberto; Schiantarelli, Fabio; Ardagna, Silvia.

TI Fiscal Policy, Profits and Investment. **AU** Alesina, Alberto F.; Perotti, Roberto; Schiantarelli, Fabio; Ardagna, Silvia.

Schiff, Aaron F.

PD October 2000. **TI** Forecasting New Zealand's Real GDP. **AU** Schiff, Aaron F.; Phillips, Peter C. B. **AA** Schiff: University of Auckland. Phillips: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1278; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. **PG** 32. **PR** no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. **JE** C11, C22, C32, C53, E27. **KW** Automated Modeling. Forecasting. PIC Model Selection. Policy Analysis. Real GDP.

AB Recent time series methods are applied to the problem of forecasting New Zealand's real GDP. Model selection is conducted within autoregressive (AR) and vector autoregressive (VAR) classes, allowing for evolution in the form of the models over time. The selections are performed using the Schwarz (1978) BIC and the Phillips-Ploberger (1996) PIC criteria. The forecasts generated by the data-determined AR models and an international VAR model are found to be competitive with forecasts from fixed format models and forecasts produced by the NZIER. Two

illustrations of the methodology in conditional forecasting settings are performed with VAR models. The first provides conditional predictions of New Zealand's real GDP when there is a future recession in the United States. The second gives conditional predictions of New Zealand's real GDP under a variety of profiles that allow for tightening in monetary conditions by the Reserve Bank.

Schmedders, Karl

TI Incomplete Markets, Transitory Shocks, and Welfare. **AU** Kubler, Felix; Schmedders, Karl.

PD March 2000. **TI** Monopolistic Security Design in Finance Economies. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1288; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 56. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C61, C63, C68, D52, G12. **KW** General Equilibrium. Incomplete Markets. Security Design. Asset Pricing. Options.

AB The purpose of this paper is to analyze endogenous asset innovation by an entrepreneurial exchange owner in a partial equilibrium model of incomplete security markets with financial transaction fees. A monopolistic market maker has the technology to introduce new securities into the economy and charge investors transaction fees if they trade on the exchange. The market maker's objective is to choose the security and transaction fee that maximize profits when opening the exchange. The authors compute the effects of asset innovation for the case of an option exchange introducing an option on a stock index. In the first set of economies agents with heterogeneous levels of risk aversion trade securities to achieve some risk sharing. In the second set of economies agents have identical risk aversion but heterogeneous beliefs which leads to trading due to the desire for portfolio re-balancing. In both types of models the introduction of the profit-maximizing option leads to a decrease of the prices of established securities. Typically small heterogeneity of beliefs leads to substantially more trading volume in the option than reasonable differences among levels of risk aversion. The author's computational approach allows him to examine some previous results.

TI Asset Trading Volume with Dynamically Complete Markets and Heterogeneous Agents. **AU** Judd, Kenneth L.; Kubler, Felix; Schmedders, Karl.

Schmukler, Sergio

PD July 2001. **TI** Globalization and Firms' Financing Choices: Evidence from Emerging Economies. **AU** Schmukler, Sergio; Vesperoni, Esteban. **AA** Schmukler: World Bank. Vesperoni: International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/01/95; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 16. **PR** \$10.00. **JE** F30, G10, G30. **KW** Finance Choices. Financial Structure. Financial Integration. Globalization. International Financial Markets.

AB This paper studies the relation between firm's financing choices and financial globalization. Using an East Asian and

Latin American firm-level panel for the 1980s and 1990s, we study how leverage ratios, debt maturity structure, and sources of financing change when economies are liberalized and when firms access international capital markets. We find that debt-equity ratios do not increase after financial liberalization. Debt maturity shortens for the average firm when countries undertake financial liberalization. However, domestic firms that actually participate in international capital markets extend their debt maturity. Financial liberalization has less effects on firms from countries with more developed domestic financial systems. Leverage ratios increase during crises.

Schnabel, Gert

TI The Taylor Rule and Interest Rates in the EMU Area.
 AU Gerlach, Stefan; Schnabel, Gert.

Schnitzer, Monika

TI Disorganization and Financial Collapse. AU Marin, Dalia; Schnitzer, Monika.

Schrag, Joel

TI Optimal Agency Relationships in Search Markets.
 AU Curran, Christopher; Schrag, Joel.

Schuh, Scott

PD November 1999. TI Gross Job Flows and Firms.
 AU Schuh, Scott; Triest, Robert K. AA Federal Reserve Bank of Boston. SR Federal Reserve Bank of Boston Working Paper: 99/10; Research Library, Federal Reserve Bank of Boston, P.O. Box 2076, Boston, MA 02106-2076. Website: www.bos.frb.org/economic/wpchro.htm. PG 10. PR no charge. JE E24, L11, L16, J63. KW Job Creation. Job Destruction. Reallocation.

AB This paper extends the work of Dunne, Roberts, and Samuelson [3] and Davis, Haltiwanger, and Schuh [2] on gross job flows among manufacturing plants. Gross job creation, destruction, and reallocation have been shown to be important in understanding the birth, growth, and death of plants, and the relation of plant life cycles to the business cycle. However, little is known about job flows between firms or how job flows among plants occur within firms (corporate restructuring). We use information on company organization from the Longitudinal Research Database (LRD) to investigate the relationship between plant-level and firm-level job flows. We document: (1) the fraction of plant-level gross flows occurring between firms; and (2) gross job flows by the extent of excess job reallocation occurring in firms.

TI Job Creation, Job Destruction, and the Real Exchange Rate. AU Klein, Michael W.; Schuh, Scott; Triest, Robert K.

TI Monetary Policy, Housing Investment, and Heterogeneous Regional Markets. AU Fratantoni, Michael; Schuh, Scott.

Schummer, James

PD November 1999. TI Almost-Dominant Strategy Implementation. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1278; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math.

PG 23. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE C70, D51, D70. KW Strategy-Proofness. Almost Dominant Strategy. Epsilon-Dominant. Allocation Rules.

AB Though some economic environments provide allocation rules that are implementable in dominant strategies (strategy-proof), a significant number of environments yield impossibility results. On the other hand, while there are quite general possibility results regarding implementation in Nash or Bayesian equilibrium, these equilibrium concepts make strong assumptions about the knowledge that players possess, or about the way they deal with uncertainty. As a compromise between these two notions, we propose a solution concept built on one premise: Players who do not have much to gain by manipulating an allocation rule will not bother to manipulate it. We search for efficient allocation rules for two-agent exchange economies that never provide players with large gains from cheating. Though we show that such rules are very inequitable, we also show that some such rules are significantly more flexible than those that satisfy the stronger condition of strategy-proofness.

Schwartz, Amy Ellen

TI Cigarettes and Alcohol: Substitutes or Complements?
 AU Decker, Sandra L.; Schwartz, Amy Ellen.

Schwarz, Gregory E.

TI Socioeconomic Impacts of Climate Variability and Change on U.S. Water Resources. AU Frederick, Kenneth D.; Schwarz, Gregory E.

Sedjo, Roger A.

PD October 1998. TI Forest Service Vision: or, Does the Forest Service Have a Future? AA Resources for the Future. SR Resources for the Future Discussion Paper: 99/03; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. PG 16. PR Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. JE H41, H42, Q23, Q26, Q28. KW Forestry. Forest Service. Forest Management. Federal Lands.

AB The Forest Service has no distinct mission, and it has no committed constituency. Without a well-defined mission or political support, the agency is unlikely to receive adequate funding from Congress. Three potential missions have been proposed. First, the Forest Service could focus on biological preservation, as suggested by the 1998 Committee of Scientists' report; the ecological services generated, however, may not attract constituents with enough power to command continuing budgets. Second, the Forest Service could focus on recreation and generate a substantial portion of its budget from user fees; conflicts among user groups might result. Third, the Forest Service could devolve management to local groups, on the Quincy Library Group model, but again, competing interest groups may complicate such a solution. Perhaps it is time to consider whether existing land management agencies should be merged into an integrated agency that can better coordinate management of our natural resources.

PD April 1999. TI Marion Clawson's Contribution to Forestry. AA Resources for the Future. SR Resources for the Future Discussion Paper: 99/33; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. PG 11. PR Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic:

\$10.00 First Class; \$6.00 Book Rate. **JE** B31, Q23, Q24, Q26, Q28. **KW** Marion Clawson. Forestry. Natural Resource Economics. Economic History. Environmental Policy.

AB Marion Clawson passed away in April 1998 at the age of 92. He was a giant in the field of resource and environmental economics who devoted the last decade and one-half of his professional career to forest and forest related issues. He produced over 30 professional books and hundreds of papers. This paper presents a broad overview of his career as an economist, with a focus on his work in and influence on forestry and forest policy. From the early 1970s through to his last professional book in 1983, and his final professional contributions in the mid 1990s, Clawson devoted most of his professional efforts to forest issues. His influence on forests and forest policy was substantial, especially in the context of public policy toward America's publicly owned forested lands. He served as an external critic of the Forest Service, regularly calling for greater attention to be given to issues of economic efficiency in the management of public lands. His influence was probably greatest during the period from the early 1970s, when his service on the President's Advisory Panel on Timber and the Environment stimulated his interest in forestry, through the mid 1980s. During this period he authored several books on forestry and a number of influential articles.

TI El Nino, Ice Storms, and the Market for Residential Fuelwood in Eastern Canada and the Northeastern U.S. **AU** Jagger, Pamela; White, William; Sedjo, Roger A.

TI The Impact of El Nino on Northeastern Forests: A Case Study on Maple Syrup Production. **AU** Bergeron, Nancy; Sedjo, Roger A.

PD November 1999. **TI** Biotechnology and Planted Forests: Assessment of Potential and Possibilities. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/06; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 27. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** L73, O32, Q16, Q21, Q23. **KW** Biotechnology. Plantation Forests. Genetic Modification. Genetic Research. Transgenic Crops.

AB Recent innovations in tree breeding and biotechnology hold promise for forestry. This overview summarizes traditional approaches to tree improvement and offers a layperson's explanation of genetic engineering or biotechnology. The adoption of transgenic crops has transformed agriculture and is now affecting forestry. Applications of biotechnology to forest plantations include genetic engineering for tolerance to herbicides (to allow more effective vegetative control and thus higher yields at lower cost), modification of specific genes to improve yields, and cloning to propagate large numbers of seedlings with desirable characteristics. Used in commercial forestry, such techniques could improve growth rates, disease and pest resistance, climate range and adaptability, tree form, and wood fiber quality for various applications. Their promise is prompting some forest products firms to invest in tree-growing research efforts despite the availability of mature timber for logging. The cost savings, value increases, and global implications of certain technologies are estimated.

PD December 1999. **TI** Eco-Labeling and the Price Premium. **AU** Sedjo, Roger A.; Swallow, Stephen K. **AA** Sedjo: Resources for the Future. Swallow: University of Rhode Island. **SR** Resources for the Future Discussion Paper: 00/04; 1616 P Street, NW, Washington, DC 20036.

Website: www.rff.org. **PG** 17. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D40, L15, L73, Q28. **KW** Eco-Labeling. Pricing. Environmental Policy. Market Structure.

AB International environmental and government organizations propose eco-labeling as a market incentive to cause industry to operate in an ecologically sustainable and biodiversity-friendly manner. A microeconomic analysis questions whether eco-labeling will cause producer profits in a competitive industry to decline, even under a voluntary system, and whether eco-labeling will necessarily generate different prices for labeled and unlabeled product. Using wood product as an example, results identify conditions that may exist when firms lose profits, even under a voluntary system, and where existing production constraints may lead to a single price, regardless of labeling.

PD December 1999. **TI** Tariff Liberalization, Wood Trade Flows, and Global Forests. **AU** Sedjo, Roger A.; Simpson, R. David. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/05; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 18. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** F01, F13, F21, L73, Q23. **KW** International Trade. Tariffs. Forestry. Forest Products. World Trade Organization.

AB The World Trade Organization is considering further reductions in wood products tariffs, including both solid wood products and pulp and paper, as proposed by the Asia Pacific Economic Community. We find that such trade liberalization is likely to generate only very modest increases in worldwide trade and production and cause modest increases in harvest pressures on forests. The countries most likely to experience export and production increases are in the northern hemisphere; they should be able to absorb additional harvests with minimal effects on the forests because of the modest nature of the impact, new forest practices laws, new forest set-asides, and movement toward improved practices to achieve multifaceted sustainable forestry. We do not expect that tariff reductions will significantly increase harvests from tropical forests. Nevertheless, tropical forests will remain under deforestation pressure primarily because of conversion to agriculture.

Seelig, Steven A.

TI Post-Resolution Treatment of Depositors at Failed Banks: Implications for the Severity of Banking Crises, Systemic Risk, and Too-Big-To-Fail. **AU** Kaufman, George G.; Seelig, Steven A.

Sekine, Toshitaka

PD June 2001. **TI** Modeling and Forecasting Inflation in Japan. **AA** Bank of Japan. **SR** International Monetary Fund Working Paper: WP/01/82; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 28. **PR** \$10.00. **JE** C51, C53, E31, E37. **KW** Inflation. Forecast. Equilibrium Correction Model. Japan.

AB This paper estimates an inflation function and forecasts one-year ahead inflation for Japan. It finds that (i) markup relationships, excess money and the output gap are particularly relevant long-run determinants for an equilibrium correction model (EqCM) of inflation; (ii) with intercept corrections, one-year ahead inflation forecast performance of the EqCM is good; and (iii) forecast accuracy can be improved by combining

forecasts of the EqCM with those made by rival models. The EqCM obtained would serve for structural model-based inflation forecasting. It also highlights the importance of adjustment to a pure model-based forecast by utilizing information of alternative models. The methodology employed is applicable to a wider range of countries including some emerging market economies.

Sekkat, Khalid

TI Sector Sensitivity to Exchange Rate Fluctuations. **AU** Fouquin, Michel; Sekkat, Khalid; Mansour, Malek J.; Mulder, Nanno; Nayman, Laurence.

Sembenelli, Alessandro

TI Research Joint Ventures and Firm Level Performance. **AU** Benfratello, Luigi; Sembenelli, Alessandro.

Sgard, Jerome

PD November 2000. **TI** La Gestion Des Crises De Liquidite Internationale: Logique De Faillite, Preteur En Dernier Ressort Et Conditionnalite (The Management of International Liquidity Crisis: the Logic of Bankruptcy, the Lender of Last Resort and Conditionality). **AA** CEPIL. **SR** CEPIL Working Paper: 2000/16; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 41. **PR** no charge. **JE** F30, G20. **KW** Financial Crisis. Lender of Last Resort. Bankruptcy. Sovereign Debt. Rescheduling.

AB This working paper studies two strategies for the management of financial crisis: the lender of last resort, which restores market stability without suspending transactions, and the bankruptcy procedure which takes the distressed agent out of the market and re-coordinates its creditors through negotiation. These logistics are compared under the viewpoint of property and contractual rights. The paper discusses then how sovereign debts have been renegotiated during the 1980s. The focus is on the concept of conditionality and on the forms of collective action within which it takes place. The decline of this international regime during the 1990s is linked to a twin tendency towards an ever larger conditionality, in terms of policy objectives, while its capacity for governance has declined steadily. Finally, the paper discusses the new forms of crisis management, based upon the lender of last resort. The engagement rules of the new Contingent Credit Line, adopted by the IMF in 1999, is analyzed as a symptom of these trends. Paper available in French only.

Sgherri, Silvia

TI The Macroeconomic Impact of HIV/AIDS in Botswana. **AU** MacFarlan, Maitland; Sgherri, Silvia.

Shami, Roland G.

TI Bayesian Exponential Smoothing. **AU** Forbes, Catherine S.; Snyder, Ralph D.; Shami, Roland G.

PD December 2000. **TI** A Structural Time Series Model with Markov Switching. **AU** Shami, Roland G.; Forbes, Catherine S. **AA** Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Paper: 00/10; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/.

PG 29. **PR** no charge. **JE** C11, C22, C53. **KW** Structural Model. Markov Switching. Gibbs Sampling. Business Cycle.

AB We propose an innovations form of the structural model underlying exponential smoothing that is further augmented by a latent Markov switching process. A particular case of the new model is the local level model with a switching drift, where the switching component describes the change between high and low growth rate periods. This new model is used to analyze the US business cycle using US Quarterly real GNP data. Model parameters are estimated using a Gibbs sampling algorithm and subsequently used for forecasting purposes. In addition, the stability of the new model is tested against Hamilton's model over a range of observation periods.

Shi, Shouyong

TI A Fundamental Theory of Exchange Rates and Direct Currency Trades. **AU** Head, Allen; Shi, Shouyong.

PD November 1998. **TI** Frictional Assignment. **AA** Queen's University and Universite du Quebec, Montreal. **SR** Queen's Institute for Economic Research Discussion Paper: 988; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html.

PG 37. **PR** Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. **JE** D33, J31, L11. **KW** Matching. Efficiency. Frictions. Skills. Wage Inequality. **AB** This paper examines efficient and equilibrium allocations in an economy where agents with diverse characteristics are matched through a time-consuming process to produce output. This is cast in a labor market where workers of different skills match with machines of different qualities. The efficient assignment is not always positively assortative and can be decentralized by a competitive mechanism where firms compete by posting wages and committing to the skill that their chosen machines are intended for. Implications on wage inequality are examined.

TI Screening, Bidding, and the Loan Market Tightness. **AU** Cao, Melanie; Shi, Shouyong.

PD April 1999. **TI** Unskilled Workers in an Economy with Skill-Biased Technology. **AA** Queen's University and Universite du Quebec, Montreal. **SR** Queen's Institute for Economic Research Discussion Paper: 987; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html.

PG 43. **PR** Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. **JE** C78, J31, J64. **KW** Wage Posting. Wage Differential. Matching. Technological Progress.

AB This paper contributes to the search theory of unemployment by endogenously deriving matching functions and surplus sharing rule for skilled and unskilled workers from a wage-posting game. In contrast to previous wage posting models, here both sides of the market are heterogeneous and the resulted matching function can exhibit non-constant returns to scale. The model provides useful explanations for the observed dynamic patterns of within-skill and between-skill wage differentials in the 1970's and 1980's.

TI Publicity and the Clustering of IPO Underpricing.

AU Cao, Melanie; Shi, Shouyong.

Shields, Kalvinder

TI Is the Franc Zone an Optimal Currency Area?
AU Fielding, David; Shields, Kalvinder.

Shih, Jih-Shyang

TI Job Versus the Environment: Is There a Trade-Off?
AU Morgenstern, Richard D.; Pizer, William A.; Shih, Jih-Shyang.

Shiller, Robert J.

TI Valuation Ratios and the Long-Run Stock Market Outlook: An Update. AU Campbell, John Y.; Shiller, Robert J.

Shin, Hyun Song

TI Global Games: Theory and Applications. AU Morris, Stephen; Shin, Hyun Song.

Shleifer, Andrei

TI Investor Protection and Corporate Valuation. AU La Porta, Rafael; Lopez-de-Silanes, Florencio; Shleifer, Andrei; Vishny, Robert.

TI Investor Protection and Corporate Valuation. AU La Porta, Rafael; Lopez-de-Silanes, Florencio; Shleifer, Andrei; Vishny, Robert.

Shogren, Jason

PD May 2000. TI Climate Change Policy. AU Shogren, Jason; Toman, Michael A. AA Shogren: University of Wyoming, Toman: Resources for the Future. SR Resources for the Future Discussion Paper: 00/22; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. PG 44. PR Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. JE D61, F42, Q25, Q28, Q48. KW Climate Change. Incentive-Based Policy. International Cooperation. Cost-Benefit Analysis. Environmental Policy.

AB Having risen from relative obscurity as few as ten years ago, climate change now looms large among environmental policy issues. In this paper, we explore the economics of climate change policy. We organize our discussion around three broad themes: why costs and benefits matter in assessing climate change policies, as does the uncertainty surrounding them; why well-designed, cost-effective climate policies are essential in addressing the threat of climate change; and why a coherent architecture of international agreements is key to successful policy implementation. We conclude the paper with a summary of key policy lessons and gaps in knowledge.

Shubik, Martin

PD December 2000. TI The Uses of Teaching Games in Game Theory Classes and Some Experimental Games. AA Yale University. SR Yale Cowles Foundation Discussion Paper: 1289; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520-8281. Website: www.econ.yale.edu/cowles. PG 16. PR no charge up to 3 papers; \$3.00 each in U.S.; \$4.00 each International. JE A20, C71, C72, C90. KW Gaming. Game Theory. Fair Division. Core. Experiments.

AB The results are presented from several experiments. They

include the selection of points in the core, interpersonal comparisons of utility, and the reconsideration of Stone's results on prominence in contrast with symmetry.

TI A Computational Analysis of the Core of a Trading Economy with Three Competitive Equilibria and a Finite Number of Traders. AU Kumar, Alok; Shubik, Martin.

Sicherman, Nachum

TI Why Do Dancers Smoke? Time Preference, Occupational Choice, and Wage Growth. AU Munasinghe, Lalith; Sicherman, Nachum.

Siegel, Jonathan M.

TI Capital Gains Realizations of the Rich and Sophisticated. AU Auerbach, Alan J.; Siegel, Jonathan M.

Simon, Nathalie

TI Mortality Risk Valuation for Environmental Policy. AU Krupnick, Alan; Alberini, Anna; Cropper, Maureen; Simon, Nathalie.

Simpson, John D.

PD February 2001. TI Geographic Markets In Hospital Mergers: A Case Study. AA Federal Trade Commission. SR Federal Trade Commission Bureau of Economics Working Paper: 237; 600 Pennsylvania Avenue, NW, Washington, DC 20580. Website: bperson@ftc.gov. PG 24. PR no charge. JE G34, I11, L41. KW Hospitals. Mergers. Geographic Markets.

AB In three recent hospital merger cases, the courts concluded that the merged hospital would be unable to increase price profitably because of competition from distant hospitals. In reaching this conclusion, the courts found the following: hospitals earn high margins on the last patients that they serve; given these high margins, a small price increase would be unprofitable if even a relatively small percentage of patients switched to other hospitals; many of the merging hospitals' patients live in "contestable" zip codes, where a large percentage of patients already use other hospitals; a price increase at the merging hospitals would prompt a large number of these patients to switch to other hospitals; and this amount of switching would make the price increase unprofitable. This paper argues that the courts in these cases erred in accepting the defendants' argument that switching by patients living in "contestable" zip codes would make a price increase at the merging hospitals unprofitable. Specifically, this paper examines the behavior of patients following a merger similar to those analyzed by these courts and finds that a large price increase prompted little switching by patients living in "contestable" zip codes.

Simpson, R. David

TI The Cost-Effectiveness of Conservation Payments. AU Ferraro, Paul J.; Simpson, R. David.

TI The Law and Economics of Habitat Conservation: Lessons from an Analysis of Easement Acquisitions. AU Boyd, James; Caballero, Kathryn; Simpson, R. David.

TI Tariff Liberalization, Wood Trade Flows, and Global Forests. AU Sedjo, Roger A.; Simpson, R. David.

Siniscalco, Domenico

PD January 2000. **TI** The Response of Companies to Information-Based Environmental Policies. **AU** Siniscalco, Domenico; Borghini, Stefania; Fantini, Marcella; Ranghieri, Federica. **AA** Siniscalco: University of Torino and Fondazione Eni Enrico Mattei. Borghini and Ranghieri: Fondazione Eni Enrico Mattei and C.R.E.A. Fantini: Fondazione Eni Enrico Mattei. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/06; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 34. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D21, L21, L23, M21, Q29. **KW** Environmental Policy. Corporate Management. Environmental Management. Corporate Compensation. Information-Based Policies.

AB This paper investigates the companies' behavioral response to information-based environmental policies. We perform a panel analysis for 39 big companies in 16 countries, in 3 polluting industries (oil & gas, chemicals, power generation) over a 5-year period (1993-1997) to check whether environmental policies (command and control and energy taxation) and the adoption of information-based environmental strategies affect the companies' economic and environmental performance. The results confirm the positive role of self-regulated environmental audits and compensation programs on corporate environmental performance.

Sinn, Hans-Werner

PD March 2000. **TI** Germany's Economic Unification: An Assessment after Ten Years. **AA** CESifo and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7586; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 24. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** H00, O52. **KW** Public Economics. Germany.

AB A political miracle occurred when Germany was reunited, and at first glance an economic miracle has followed. Real incomes in the east have now reached the western level, and investment per capita has been much higher than in the west. However, every third deutschmark spent in the east has been coming from the west, investment in equipment has fallen below the west German per capita level, and convergence seems to have come to a halt at an overall labor productivity of only 55 percent of west Germany. Excessively high wages coupled with investment incentives that made the cost of capital negative rank high among the possible explanations. This paper describes reforms of the labor market that could help to make convergence continue.

PD March 2000. **TI** Why a Funded Pension System is Useful and Why It is Not Useful. **AA** CESifo and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7592; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 31. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** H55. **KW** Social Security. United States.

AB Based on explicit present value calculations, the paper criticizes the view that the PAYGO (pay-as-you-go) system wastes economic resources. In present value terms, there is nothing to be gained from a transition to a funded system, even though the latter offers a permanently higher rate of return. The sum of the implicit and explicit tax burdens that result from the

need to respect the existing pension claims is the same under all systems and transition strategies. Nevertheless, partial transition to a funded system may be a way to overcome the current demographic crisis because it replaces missing human capital with real capital and helps smooth tax and child rearing costs across the generations.

Sjostrom, Tomas

TI Optimal Design of Peer Review and Self-Assessment Schemes. **AU** Baliga, Sandeep; Sjostrom, Tomas.

Slade, Margaret E.

PD March 2001. **TI** Assessing Market Power in UK Brewing. **AA** University of British Columbia. **SR** University of British Columbia, Department of Economics Discussion Paper: 01/04; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 51.

PR International. **JE** D43, L13, L41, L66, L81. **KW** Market Power. Oligopoly. Mergers. Differentiated Products. Multiproduct Firms.

AB Market power in UK brewing is examined. To do this, quantitative methods that can be used to estimate price/cost margins and to decompose those margins into economic factors are assessed. Two classes of demand equations are estimated: the nested logit of McFadden (1978a) and the distance-metric method of Pinkse, Slade, and Brett (1998). Marginal costs are approximated in three ways. Finally, various notions of industry equilibrium are compared. With this application, the most important decision from the point of view of market-power assessment turns out to be the choice of demand model. Different classes of demand equations yield very different predictions concerning elasticities and markups, whereas, within a demand model class, all methods of assessing market power result in similar predictions concerning industry performance. With a distance-metric demand equation, a static Nash equilibrium in which players set the prices of the brands that they own receives greatest empirical support. Furthermore, both differentiation and fewness endow the firms in the brewing industry with the power to charge prices in excess of marginal costs, but no evidence of collusion is uncovered.

Slaughter, Matthew J.

TI Have Falling Tariffs and Transportation Costs Raised U.S. Wage Inequality? **AU** Haskel, Jonathan E.; Slaughter, Matthew J.

Slok, Torsten

TI Wealth Effects and the New Economy. **AU** Edison, Hali; Slok, Torsten.

TI New Economy Stock Valuations and Investment in the 1990s. **AU** Edison, Hali; Slok, Torsten.

Small, Kenneth A.

PD January 2000. **TI** The Value of "Value Pricing" of Roads: Second-Best Pricing and Product Differentiation. **AU** Small, Kenneth A.; Yan, Jia. **AA** University of California, Irvine. **SR** Resources for the Future Discussion Paper: 00/08; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 26. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00

Book Rate. **JE** L15, R41, R48. **KW** Value Pricing. Congestion Pricing. Value of Time. Road Pricing. Toll Lanes. **AB** Some road-pricing demonstrations use an approach called "value pricing", in which travelers can choose between a free but congested roadway and a priced roadway. Recent research has uncovered a potentially serious problem for such demonstrations: in certain models, second-best tolls are far lower than those typically charged, and the welfare gains from profit maximization are small or even negative. That research, however, assumes that all travelers are identical, and it therefore neglects the benefits of product differentiation, by which people with different values of time can choose a suitable cost/quality combination. Using a model with two user groups, we find that accounting for heterogeneity in value of time is important in evaluating constrained policies, and improves the relative performance of policies that offer differential prices. Nevertheless, for most of the reasonable range of heterogeneity, second-best pricing produces far fewer benefits than pricing both roadways optimally, and profit-maximizing tolls are so high that over all welfare is reduced from the no-toll baseline.

Smith, James P.

TI Anticipated and Actual Bequests. **AU** Hurd, Michael D.; Smith, James P.

Smith, V. Kerry

PD May 1999. **TI** Benefit Transfer as Preference Calibration. **AU** Smith, V. Kerry; Van Houtven, George; Pattanayak, Subhrendu. **AA** Smith: Duke University and Resources for the Future. Van Houtven and Pattanayak: Research Triangle Institute. **SR** Resources for the Future Discussion Paper: 99/36; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 40. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D61, H40, Q20. **KW** Benefit Transfer. Calibration. Non-Market Valuation. Natural Resource Economics.

AB This paper proposes and illustrates the use of a new approach to benefit transfer for the non-market valuation of environmental resources. It treats transfer as an identification problem that requires assessing whether available benefit estimates permit the parameters of a preference function to be identified. The transfer method proposed uses these identifying restrictions to calibrate preference parameters and bases the benefit estimates on that preference function. The approach is illustrated using travel cost, hedonic and contingent valuation estimates, as well as combinations of estimates. It has three potential advantages over conventional practice: it allows multiple, potentially overlapping estimates of the benefits of an improvement in environmental quality to be combined consistently; it assures the transferred estimates of the benefits attributed to a proposed change can never exceed income; and it provides a set of additional "outputs" that offer plausibility checks of the benefit transfers.

Snyder, Ralph D.

TI Bayesian Exponential Smoothing. **AU** Forbes, Catherine S.; Snyder, Ralph D.; Shami, Roland G.

TI A State Space Framework for Automatic Forecasting Using Exponential Smoothing Methods. **AU** Hyndman, Rob J.; Koehler, Anne B.; Snyder, Ralph D.; Grose, Simone.

PD August 1999. **TI** Forecasting for Inventory Control With Exponential Smoothing. **AU** Snyder, Ralph D.; Koehler, Anne B.; Ord, Keith. **AA** Snyder: Monash University. Koehler: Miami University. Ord: Pennsylvania State University. **SR** Monash Department of Econometrics and Business Statistics Working Paper: 99/10; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/. **PG** 28. **PR** no charge. **JE** C22, C44. **KW** Inventory Control. Demand Forecasting. Exponential Smoothing. Bootstrap Methods.

AB Exponential smoothing, often used for sales forecasting in inventory control, has always been rationalized in terms of statistical models that possess errors with constant variances. It is shown in this paper that exponential smoothing remains the appropriate approach under more general conditions where the variances are allowed to grow and contract with corresponding movements in the underlying level. The implications for estimation and prediction are explored. In particular the problem of finding the prediction distribution of aggregate lead-time demand for use in inventory control calculations is considered. It is found that unless a drift term is added to simple exponential smoothing, the prediction distribution is largely unaffected by the variance assumption. A method for establishing order-up-to levels and reorder levels directly from the simulated prediction distributions is also proposed.

PD December 1999. **TI** Understanding the Kalman Filter: An Object Oriented Programming Perspective. **AU** Snyder, Ralph D.; Forbes, Catherine S. **AA** Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Paper: 99/14; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/. **PG** 10. **PR** no charge. **JE** C22, C63. **KW** Time Series Analysis. Forecasting. Kalman Filter. Dynamic Linear Models. Object Oriented Programming.

AB The basic ideas underlying the Kalman filter are outlined in this paper without direct recourse to the complex formulae normally associated with this method. The novel feature of the paper is its reliance on a new algebraic system based on the first two moments of the multivariate normal distribution. The resulting framework lends itself to an object-oriented implementation on computing machines and so many of the ideas are presented in these terms. The paper provides yet another perspective of Kalman filtering, one that many should find relatively easy to understand.

Soderbom, Mans

PD 2000. **TI** Skills, Investment and Exports from Manufacturing Firms in Africa. **AU** Soderbom, Mans; Teal, Francis. **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/08; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 28. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** D24, O12. **KW** African Manufacturing. Exports. Investment.

AB It has been argued that Africa will not be able to export manufactures as it lacks the necessary skills. Without an ability to export there will only be an incentive to invest in the sector if domestic demand grows rapidly. Comparative data for four African countries -- the Cameroon, Ghana, Kenya and Zimbabwe -- shows that in the early 1990s investment in

manufacturing remained very low. The micro evidence on manufacturing exports is wholly consistent with the macro in suggesting these are, for most African countries, negligible. An exception is Zimbabwe. The paper uses a longer time series from Ghana to ask how skills have impacted on manufacturing investment and exports in the 1990s. Two dimensions of skills are defined and measured. The first is that observable in the education and experience of the workforce. The second is the underlying efficiency with which the firm operates. The latter is shown to be a significant determinant of both investment and exports. These exports are relatively capital intensive; unskilled labor intensive exports remain negligible. Possible reasons for these outcomes are discussed.

TI Managerial Risk Attitudes and Firm Performance in Ghanaian Manufacturing: An Empirical Analysis Based on Experimental Data. **AU** Pattillo, Catherine; Soderbom, Mans.

Solan, Eilon

TI Randomization and Simplification. **AU** Kalai, Ehud; Solan, Eilon.

TI Blackwell Optimality in Markov Decision Processes with Partial Observation. **AU** Rosenberg, Dinah; Solan, Eilon; Vieille, Nicolas.

PD April 2000. **TI** Uniform Value in Recursive Games. **AU** Solan, Eilon; Vieille, Nicolas. **AA** Solan: Northwestern University. Vieille: Universite Bordeaux. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1293; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 21. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C72, C73. **KW** Recursive Games. Uniform Value. Action Sets.

AB We address the problem of existence of the uniform value in recursive games. We give two existence results. (i) The uniform value is shown to exist if the state space is countable, the action sets are finite and if, for some a greater than 0, there are finitely many states in which the limsup value is less than a. (ii) For games with non-negative payoff functions, it is sufficient that the action set of player 2 is finite. The finiteness assumption can be further weakened.

PD June 2000. **TI** Rationality and Extensive Form Correlated Equilibria in Stochastic Games. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1298; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 26. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C73. **KW** Stochastic Games. Extensive Form. Correlated Equilibrium. Rationality. Direct Communication.

AB We define the notion of rational payoffs in stochastic games. We then prove that the set of rational payoffs coincides with the set of extensive form correlated equilibrium payoffs; those are equilibrium payoffs in an extended game that includes

an autonomous correlation device: a device that sends at every stage a private signal to each player, which is independent of the play, but may depend on previous signals. In particular, it follows that communication between the players and/or between the players and the correlation device cannot increase the set of equilibrium payoffs.

Solon, Gary

TI Earnings Dynamics and Inequality Among Canadian Men, 1976-1992: Evidence from Longitudinal Income Tax Records. **AU** Baker, Michael; Solon, Gary.

Sorensen, Peter

TI Herd Behavior and Investment: Comment. **AU** Ottaviani, Marco; Sorensen, Peter.

TI Information Aggregation in Debate. **AU** Ottaviani, Marco; Sorensen, Peter.

TI Professional Advice. **AU** Ottaviani, Marco; Sorensen, Peter.

TI Notes on Reputational Cheap Talk. **AU** Ottaviani, Marco; Sorensen, Peter.

Sorm, Vit

TI A Comparative Look at Labour Mobility in the Czech Republic: Where Have All the Workers Gone? **AU** Terrell, Katherine; Sorm, Vit.

Spagnolo, Giancarlo

PD December 1999. **TI** Debt as a (Credible) Collusive Device, or: "Everybody Happy but the Consumer". **AA** Churchill College, Cambridge and Stockholm School of Economics. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 99/94; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 48. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D21, G32, L13, L41. **KW** Banks. Oligopoly. Financial Market. Product Market Interaction. Capital Structure. Managerial Incentives. Collusion. Governance.

AB The paper proposes a theory of the anti-competitive effects of debt finance based on the interaction between capital structure, managerial incentives, and firms' ability to sustain collusive agreements. It shows that shareholders' commitments that reduce conflicts with debtholders -- such as hiring managers with valuable reputations or "conservative" incentives -- besides reducing the agency costs of debt finance also greatly facilitate tacit collusion in product markets. Concentrated or collusive credit markets, or large banking groups, can ensure the credibility of such commitments (renegotiation-proofness), thereby "exporting" collusion through leverage in otherwise competitive downstream product markets.

PD December 1999. **TI** Markets and Cooperation. **AA** Stockholm School of Economics. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 99/100; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 20. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C72, D51, O17. **KW** Co-operation. Repeated Games. Prisoner's Dilemma. Commons. Reciprocal Exchange. Implicit Contracts. Collusion. Institutions.

AB Why do money and markets crowd out co-operative relations? This paper characterizes the effects of intertemporal preferences, money, and markets on players' ability to co-operate in material-payoff supergames. Players' aversion to intertemporal substitution facilitates co-operation by decreasing their evaluation of short-run gains from deviations and increasing that of losses from punishments. Goods' markets and money may hinder co-operation by allowing players to reallocate short-run gains from deviations in time, at some cost. Allowing for free intertemporal reallocation of payoffs, perfect financial markets always make co-operation harder. Financial markets' imperfections facilitate co-operation by opposing this effect.

Spencer, Barbara J.

TI Strategic Trade Policy with Endogenous Choice of Quality and Asymmetric Costs. **AU** Zhou, Dongsheng; Spencer, Barbara J.; Vertinsky, Ilan.

Spicer, John

TI Long-Term Information: Short-Lived Derivative Securities. **AU** Bernhardt, Dan; Davies, Ryan; Spicer, John.

Spiegel, Yossi

PD June 2000. **TI** Optimal Multiproduct Nonlinear Pricing with Correlated Consumer Types. **AU** Spiegel, Yossi; Wilkie, Simon. **AA** Speigel: Tel Aviv University. Wilkie: California Institute of Technology. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1299; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leveone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 25. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D42, D82, L12. **KW** Nonlinear Prices. Multidimensional Types. Correlated Types. Incremental Costs. Clarke-Groves Mechanisms.

AB In this paper we examine the design of nonlinear prices by a multiproduct monopolist who faces customers with multidimensional but correlated types. We show that the monopoly can exploit the correlations between consumers' types to design pricing mechanisms that fully extract the surplus from each consumer. Our main insight is that regardless of the dimensionality of the consumers' types and the number of goods produced by the monopoly, the surplus that each consumer gets after buying is a scalar. Hence, it is possible to design a two step mechanism where in the first step the monopoly induces the consumers to make efficient purchasing decisions (given their private information), and in the second step he extracts the surplus from each consumer via a (random) fixed fee.

Stasavage, David

PD 1999. **TI** Are Cash Budgets a Cure for Excess Fiscal Deficits (and at What Cost)? **AU** Stasavage, David; Moyo, Dambisa. **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/1999/11: CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csaee.ox.ac.uk/. **PG** 30. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** E62, E65.

KW Uganda. Zambia. Cash Budgets. Fiscal Deficits.

AB This paper investigates the effect of recent reforms of budgetary institutions in Uganda and Zambia. We argue that cash budgeting has brought clear benefits in terms of improved expenditure control with regard to line ministries. However, contrary to what is often suggested, adoption of a cash budget has not provided a means for top politicians in either country to "tie their hands" with respect to intervention in fiscal policy decisions. In Uganda improved fiscal policy outcomes have in fact, been achieved as a result of (and not in spite of) discretionary interventions by top politicians. In Zambia, a strict rule imposing a balanced budget on a monthly basis is both ineffective as a commitment device and costly in terms of increased volatility of expenditures.

Stavins, Joanna

TI Network Externalities and Technology Adoption: Lessons from Electronic Payments. **AU** Gowrisankaran, Gautam; Stavins, Joanna.

Stavins, Robert N.

PD January 2000. **TI** Experience with Market-Based Environmental Policy Instruments. **AA** Harvard University and Resources for the Future. **SR** Resources for the Future Discussion Paper: 00/09; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 67. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** Q21, Q28, Q31, Q41, Q48. **KW** Environmental Policy. Market-Based Instruments. Pollution Charges. Tradable Permits. Market Barriers.

AB Environmental policies typically identify a goal and prescribe some means to achieve that goal. This draft chapter from the forthcoming Handbook of Environmental Economics examines the means of environmental policy, particularly economic-incentive or market-based policy instruments. I review four categories -- pollution charges, tradable permits, market barrier reductions, and government subsidy reductions - and compare instruments from around the world. Market-based instruments have not come close to replacing conventional command-and-control approaches to environmental protection, and even where the new approaches have been used in their purest form, as in the tradable-permit systems in the United States, they have not always performed as anticipated. Nevertheless, they appear to be able to reduce pollution at low cost. I ask what lessons can be learned from experience thus far and consider normative lessons for design and implementation, analysis of prospective and adopted systems, and identification of new applications.

TI Cost Heterogeneity and the Potential Savings from Market-Based Policies. **AU** Newell, Richard G.; Stavins, Robert N.

TI What Has Kyoto Wrought? The Real Architecture of International Tradable Permit Markets. **AU** Hahn, Robert W.; Stavins, Robert N.

TI Climate Change and Forest Sinks: Factors Affecting the Costs of Carbon Sequestration. **AU** Newell, Richard G.; Stavins, Robert N.

Stein, Jeremy C.

TI Differences of Opinion, Rational Arbitrage and Market Crashes. **AU** Hong, Harrison; Stein, Jeremy C.

Steinmeier, Thomas L.

TI Retirement Outcomes in the Health and Retirement Study. **AU** Gustman, Alan L.; Steinmeier, Thomas L.

TI How Effective is Redistribution Under the Social Security Benefit Formula? **AU** Gustman, Alan L.; Steinmeier, Thomas L.

TI What People Don't Know About Their Pensions and Social Security: An Analysis Using Linked Data from the Health and Retirement Study. **AU** Gustman, Alan L.; Steinmeier, Thomas L.

Sterner, Thomas

PD June 2000. **TI** Output-Eased Refunding of Emission Payments: Theory, Distribution of Costs, and International Experience. **AU** Sterner, Thomas; Høglund, Lena. **AA** University of Gothenburg. **SR** Resources for the Future Discussion Paper: 00/29; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. **PG** 18. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** H23, Q25, Q28. **KW** Refunded Charges. Environmental Policy. Air Pollution. Market-Based Instruments. Incentives.

AB In this paper, we discuss the effect of refunding environmental charges. Taxes often are resisted by polluters because they imply both abatement and tax costs. We show that when charges are refunded, the incentives for abatement are essentially the same as for a tax, but the output reduction that often accompanies a tax scheme is forgone. We describe and examine the refund emissions payment (REP) scheme as a policy instrument for emissions abatement and compare it with taxes and permits with regard to allocative properties, distribution of costs, property rights, and, consequently, the politics of implementation. As an empirical example, the Swedish charge on nitrogen oxides is analyzed.

Stoessell, Terrell

TI The Benefits of Air Pollutant Emissions Reductions in Maryland: Results from the Maryland Externalities Screening and Valuation Model. **AU** Austin, David; Krupnick, Alan; Burtraw, Dallas; Stoessell, Terrell.

Strachan, Rodney W.

PD July 2000. **TI** Valid Bayesian Estimation of the Cointegrating Error Correction Model. **AA** Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Paper: 00/06; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/. **PG** 32. **PR** no charge. **JE** C11, C12, C13, C32. **KW** Identification Restrictions. Singular Value Decomposition. Error Correction Model. Cointegration. Bayesian Analysis.

AB Two methods of identifying cointegrating vectors are commonly used: linear restrictions and the nonlinear method of Johansen's maximum likelihood procedure. That linear method can produce invalid estimates while the Johansen approach always produces valid estimates has been recognized in several recent articles. As all Bayesian studies to date have used linear restrictions, this article presents a Bayesian method for obtaining estimates of cointegrating vectors that will always be valid.

PD October 1999. **TI** Bayesian Trace Statistics for the Reduced Rank Regression Model. **AU** Strachan, Rodney W.; Inder, Brett A. **AA** Monash University. **SR** Monash Department of Econometrics and Business Statistics Working Paper: 99/13; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/. **PG** 25. **PR** no charge. **JE** C11, C12, C32. **KW** Reduced Rank Regression. Error Correction Model. Marginal Likelihoods. Bayes Factors. Bayesian Analysis.

AB Estimation of the reduced rank regression model requires restrictions be imposed upon the model. Two forms of restrictions are commonly used. Earlier Bayesian work relied on the triangular method of identification which imposes an a priori ordering on the variables in the system, however, incorrect ordering of the variables can result in model misspecification. Bayesian estimation of the reduced rank regression model without ordering restrictions was presented in Strachan (1998) and follows the classical approach of Anderson (1951) and Johansen (1988). This method of estimation avoids placing restrictions on the space spanned by the reduced rank relations and simplifies testing of restrictions on that space. In this paper, a method for estimating approximate marginal likelihoods and Bayes factors is presented for this model, using Laplace approximations for integrals. These Bayes factors algebraically resemble the Johansen trace statistic (1995), hence the title. We consider the model with rank r and no restrictions on the reduced rank relations.

Strahan, Philip E.

TI Obstacles to Optimal Policy: The Interplay of Politics and Economics in Shaping Bank Supervision and Regulation Reforms. **AU** Kroszner, Randall S.; Strahan, Philip E.

Strauss-Kahn, Dominique

TI Trade Rules and Global Governance: a Long Term Agenda and The Future of Banking in Europe. **AU** Jacquet, Pierre; Pisani-Ferry, Jean; Strauss-Kahn, Dominique; Schmidt, Reinhart H.

TI Trade Rules and Global Governance: a Long Term Agenda and The Future of Banking in Europe. **AU** Jacquet, Pierre; Pisani-Ferry, Jean; Strauss-Kahn, Dominique; Schmidt, Reinhart H.

Sun, Yixiao

TI Local Polynomial Whittle Estimation of Long-Range Dependence. **AU** Andrews, Donald W. K.; Sun, Yixiao.

Svensson, Lars E. O.

PD March 2000. **TI** The First Year of the Eurosystem: Inflation Targeting or Not? **AA** Princeton University, Centre for Economic Policy Research, and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7598; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 8. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** E42, E52, E58. **KW** European Central Bank. Monetary Targeting. Transparency.

AB This paper is a brief evaluation of the Eurosystem's monetary-policy regime after its first year, in particular of the extent to which it is similar to inflation targeting as practiced

by an increasing number of central banks. Examining the Eurosystem's goals provides a framework for monetary-policy decisions and communication with outsiders. Criteria for evaluation are whether the goals are unambiguous and appropriate; whether the decision framework is efficient in collecting and processing information and reaching decisions that are appropriate relative to the goals; and whether the communication is effective in motivating decisions, simplifying external evaluation and thereby improving transparency and accountability. The paper also considers whether the actual instrument setting has been appropriate, given the information available at the times of decision.

Swaine, Daniel G.

PD October 1999. **TI** Is the U.S. Economy Characterized by Endogenous Growth? A Time-Series Test of Two Stochastic Growth Models. **AA** Federal Reserve Bank of Boston. **SR** Federal Reserve Bank of Boston Working Paper: 99/09; Research Library, Federal Reserve Bank of Boston, P.O. Box 2076, Boston, MA 02106-2076. **Website:** www.bos.frb.org/economic/wpchrono.htm. **PG** 27. **PR** no charge. **JE** B41, C22, O18, O41, R11. **KW** Economic Growth. Exogenous Growth Models. Endogenous Growth Models. Convergence. Economic Development.

AB This paper tests for endogenous growth using per-capita income data for the eight U.S. census regions. The empirical growth literature rejects endogenous growth on the basis of convergence dynamics that are rationalized with a deterministic model. In a stochastic setting, both the exogenous and AK growth models exhibit identical dynamic adjustment processes, so that convergence cannot be used to discriminate between them. We use a stochastic growth framework and employ an alternative test for endogenous growth that requires us to look for a single common trend. The regional data contain many common trends, but we find that this is due to structural breaks in the parameters of the cointegrating vectors. Taking these breaks into account, we find a single growth shock that is common to all eight regions. Estimating a structural time-series system, we find segmented deterministic trends for all eight census regions, which is evidence in support of endogenous growth.

Swallow, Stephen K.

TI Eco-Labeling and the Price Premium. **AU** Sedjo, Roger A.; Swallow, Stephen K.

Swanson, Timothy

PD September 2000. **TI** Conflicts in Conservation: Aggregating Total Economic Values. **AU** Swanson, Timothy; Mourato, Susanna; Swierzbinski, Joe; Kontoleon, Andreas. **AA** University College London. **SR** University College London Discussion Papers in Economics: 2000/06; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. **Website:** netec.mcc.ac.uk/WoPEc.html. **PG** 21. **PR** 4 pounds or \$8.00. **JE** F42, H43, Q26, Q28. **KW** Environmental Policy. Development. Valuation. Endangered Species. Conservation.

AB This paper investigates conflicting views on conservation measures in order to inform the policy making process of CITES -- the Convention on International Trade in Endangered Species. The paper reports the results of a survey of individuals in the UK who were asked their willingness to pay to support

various conservation programs for the black rhinoceros ranging from eco-tourism to trophy hunting. The paper analyzes how various stated motivations underlying the non-use values affected support for different management regimes. The analysis uncovers a substantial "vicarious disutility" motive whose presence has implications for what agreements are feasible in forums like CITES and also for the methods by which conservation efforts may best be funded.

Swierzbinski, Joe

TI Does Minimax Work? An Experimental Study. **AU** Binmore, Ken; Swierzbinski, Joe; Proulx, Chris.

TI Conflicts in Conservation: Aggregating Total Economic Values. **AU** Swanson, Timothy; Mourato, Susanna; Swierzbinski, Joe; Kontoleon, Andreas.

TI Conflicts in Conservation: Aggregating Total Economic Values. **AU** Swanson, Timothy; Mourato, Susanna; Swierzbinski, Joe; Kontoleon, Andreas.

Szymanski, Stefan

TI Racial Discrimination in English Football. **AU** Preston, Ian; Szymanski, Stefan.

Tabellini, Guido

PD September 1999. **TI** Political Economics and Public Finance. **AU** Tabellini, Guido; Persson, Torsten. **AA** Tabellini: IGER (Innocenzo Gasparini Institute for Economic Research), Universita Bocconi. Persson: Institute for International Economic Studies (IIES). **SR** Centre for Economic Policy Research Discussion Paper: 2235; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. **Website:** www.cepr.org. **PG** 136. **PR** 5 pounds, \$8 or 8 euros. **JE** E62, H50, H60. **KW** Public Economics. Politics. Lobbying. Redistribution.

AB Observed fiscal policy varies greatly across time and countries. What is the explanation for this variation? This paper surveys the recent literature that has tried to answer this question. Adopting a unified approach in portraying public policy as the equilibrium outcome of an explicitly specified political process, the material is divided into three parts. In Part I focuses on median-voter equilibria that apply to policy issues where disagreement between voters is likely to be one-dimensional, thus studying general redistributive programs typical of the modern welfare state. In Part II studies special interest politics. Here the policy problem is multidimensional so the focus is on specific political mechanisms: legislative bargaining, lobbying, and electoral competition, as well as the possible interactions between these different forms of political activity. Finally, Part III deals with a set of questions that can be brought under the label of comparative politics, dealing with policy choice under alternative political constitutions, modeling some stylized features of congressional and parliamentary political systems and focusing on their implications for rent extraction by politicians, redistribution and public goods provision.

Taffesse, Alemayehu Seyoum

PD 1999. **TI** Compulsory Grain Delivery, Crop Prices and the Dynamics of Crop Supply. **AA** University of Addis Ababa. **SR** Centre for the Study of African Economies Working Paper: WPS/1999/16; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL,

United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 42. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** Q12, Q13. **KW** Forced Procurement. Grain Production. **AB** An intertemporal acreage allocation model that allows for the impact of compulsory grain delivery is developed. Subsequently, an estimable dynamic acreage demand equation is derived, and estimated for a crop using regional data. Generalized method of moments (GMM) estimators for dynamic panel data models are used. The elasticity estimates thus obtained suggest that the demand for crop acreage (and hence the supply of crop output) responds negatively to the level of forced grain procurement, positively to output own-price, and negatively to gross returns from alternative crops.

PD 1999. **TI** An Economic Model of the Ethiopian Farm Household. **AA** University of Addis Ababa. **SR** Centre for the Study of African Economies Working Paper: WPS/1999/26; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 48. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** Q12, Q15. **KW** Ethiopia. Rationing. Forced Procurement.

AB This paper presents a simple model of an Ethiopian farm household which captures three important aspects of the policy regime characterizing the Derg period. These aspects are compulsory grain delivery, rationing in manufactured consumer goods, and rationing in modern farm inputs. The model involves two main innovations within the agricultural household modeling framework. First, a new procedure of analyzing the impact of the policy of forced grain procurement is introduced. The procedure enables us to directly characterize the effects of that policy on farm households' welfare, as well as the production and consumption choices they make. Second, it pulls together various strands of the relevant literature in a simple manner. In particular, it provides a more direct way of determining the welfare effects of rationing, compulsory grain delivery, prices, and incomes. Both individual and joint effects can be handled this way. The comparative static properties of the model directly show that forced grain procurement by the state reduces the welfare of farm households and distorts their production choices. The results also indicate that shortages (rationing) in manufactured consumer goods and modern inputs make commodity demands, input demands, and output supplies less price responsive.

Tamborra, Marialuisa

TI Juridical Framework of Voluntary Agreements in Italy and Policy Relevance at the Local Level. **AU** Milizia, Paola; Tamborra, Marialuisa.

Tarr, David

TI International Knowledge Flows and Economic Performance -- An Introductory Survey of the Evidence. **AU** Barba Navaretti, Giorgio; Tarr, David.

Taylor, Alan M.

TI Internal Versus External Convertibility and Developing-Country Financial Crises: Lessons From the Argentine Bank Bailout of the 1930s. **AU** della Paolera, Gerardo; Taylor, Alan M.

PD October 1999. **TI** Latin America and Foreign Capital in the Twentieth Century: Economics, Politics, and Institutional Change. **AA** University of California, Davis and

NBER. SR National Bureau of Economic Research Working Paper: 7394; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 21. **PR** \$5.00. **JE** E60, F41, F43, G15, N16. **KW** Latin America. Economic Growth. Capital Markets. Political Economy. Open Economy.

AB Latin America's capital inflows were large by global standards at the century's turn, and even up to the 1930's. The Great Depression is conventionally depicted as a turning in Latin America for commercial policy and protectionism, thus marking the onset of import substitution and a long-run increase in barriers in international goods markets. However, this paper argues that policy responses in the 1930's, and subsequent decades of relative economic retardation, can be better understood as the cause and effect of the creation of long-run barriers in international capital markets. To support this notion, the author discusses the quantitative extent of these barriers and their effects on economic growth. As for causality, he argues that the political economy of institutional changes in the 1930's in the periphery might be understood in similar terms to those economic historians have used to discuss the macroeconomic crisis in the core. Such a political-economy model might predict the "reactive" and "passive" responses by periphery countries to external shocks, and the persistence of such shocks in the postwar period. In conclusion, the author touches on the important implications of these ideas for the current situation in Latin America.

Taylor, Christopher T.

PD June 2001. **TI** The Economic Effects of Withdrawn Antidumping Investigations: Is There Evidence of Collusive Settlements. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 240; 600 Pennsylvania Avenue, NW, Washington, DC 20580. Website: bperson@ftc.gov. **PG** 28. **PR** no charge. **JE** C13, F13, K21, K22, L40. **KW** Antidumping. Trade Policy. Collusion. Antitrust. Imports.

AB This paper analyzes the effects of antidumping and countervailing duty cases initiated from 1990 to 1997 that ended in withdrawn petitions without a suspension agreement or voluntary export restraint. Monthly import data are used to estimate the price and quantity effects of the withdrawn cases. The effects of the petition being withdrawn do not support the accepted wisdom that withdrawn petitions are a signal of collusion. However, a few of the cases show changes in price and quantities consistent with collusion. This is an important issue, since out-of-court settlements of unfair trade cases which restrict quantities or increase prices are not only welfare reducing but are also actionable under the antitrust laws; they are not exempt under the Noerr-Pennington doctrine.

Tazdait, Tarik

TI Partial and Global Cooperation with Unilateral Commitment in the Presence of Global Environmental Problems. **AU** Perea, Jean-Christophe; Tazdait, Tarik.

Teal, Francis

PD 2000. **TI** Private Sector Wages and Poverty in Ghana, 1988-1998. **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/06; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 23. **PR** 3 pounds/\$5

plus p+p (subscription 55 pounds or \$88). **JE** I32, J31, O55. **KW** Ghana. Real Wages. Poverty.

AB Real wage rises for the unskilled are one mechanism by which poor people can obtain rises in their incomes and a reduction in their economic vulnerability. In this paper it is shown that over a period in Ghana when measured poverty declined, 1988 to 1992, real wages for the unskilled rose, by about 11 per cent. Over the 1990s evidence from the manufacturing sector suggests substantial falls in the real wages of the unskilled, some 23-26 percent between 1992 and 1998. In the longer term such wages are lower than those of the mid 1980s and approximately one-third the level of the early 1970s. Even if poverty can be reduced in this context, any fall in poverty will omit one of the most vulnerable groups of the working population. There is evidence that high rates of inflation and low investment are two factors explaining these falls in real wages.

TI Skills, Investment and Exports from Manufacturing Firms in Africa. **AU** Soderbom, Mans; Teal, Francis.

Teatini, Pietro

PD April 2000. **TI** The Impact of Climate Change, Sea-Storm Events and Land Subsidence in the Adriatic. **AU** Teatini, Pietro; Gambolati, Giuseppe. **AA** University of Padova. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/21; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 17. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C61, C63, Q21, Q31. **KW** Numerical Models. Sea Level Rise. GIS Simulation. Risk Analysis.

AB The Northern Adriatic coastland comprised between the cities of Monfalcone and Cattolica is characterized by locations of great tourist interest, such as the Venice Lagoon and the Romagna Riviera, and areas with a very precarious environmental setting, such as the Valli di Comacchio and the Po river delta. **T** In the study area land may subside due to sediment natural compaction and subsurface fluid (water and gas) withdrawal. At the same time littoral transport of solid material can contribute appreciably to change the shore morphology. Mean sea level may rise permanently due to global climate change and occasionally due to tides and intensive storm events. The predictions of each individual process are obtained using ad hoc mathematical models and the outcome of the numerical simulations are managed with a GIS (Geographical Information System). Coastline evolution until the year 2100 is investigated and risk factor maps of the low-lying coastal areas are generated which account for the hazard of the expected event, and the land economic value and vulnerability.

Terrell, Katherine

PD October 1999. **TI** A Comparative Look at Labour Mobility in the Czech Republic: Where Have All the Workers Gone? **AU** Terrell, Katherine; Sorm, Vit. **AA** University of Michigan. **SR** Centre for Economic Policy Research Discussion Paper: 2263; CEPR, 90- 98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** C41, H53, J23. **KW** Mobility. Transition Economies. Czech Republic. Hazards.

AB This paper provides a comparative analysis of the extent and determinants of labor mobility in the Czech Republic

during 1994-1998. The analysis is motivated by the fact that labor mobility is crucial for an efficient allocation of resources and transition economies are often viewed as suffering from inadequate reallocation of labor. The Czech labor market has shown a great deal of flexibility, with significant movement into the newly created finance, trade and tourism sectors and considerable outflows from the agricultural and industrial sectors. Over half of the people who change jobs have changed sector of employment. Although flows out of employment are small relative to other transition countries, there is a high degree of turnover in the pool of unemployed and job-to-job flows are relatively high (except compared to Russia). These flows are very responsive to demand conditions. The younger and more educated are the ones experiencing the most mobility and the more positive directions of mobility. The existing problems of inadequate restructuring appear to have their origins outside the labor market.

Thaicharoen, Yungyong

TI Bond Restructuring and Moral Hazard: Are Collective Action Clauses Costly? **AU** Becker, Torbjorn; Richards, Anthony; Thaicharoen, Yungyong.

Thomas, Charles J.

PD July 2000. **TI** A Comparison of Auctions and Multilateral Negotiations. **AU** Thomas, Charles J.; Wilson, Bart J. **AA** Thomas: Federal Trade Commission. Wilson: University of Arizona. **SR** Federal Trade Commission Bureau of Economics Working Paper: 231; 600 Pennsylvania Avenue, NW, Washington, DC 20580. Website: bperson@ftc.gov. **PG** 41. **PR** no charge. **JE** C78, C90, D44, L14, L40. **KW** Bargaining. Auctions. E-Commerce. Mergers. Multilateral Negotiations.

AB We compare the well-known first-price auction with a common but previously unexamined exchange process that we term "multilateral negotiations." In multilateral negotiations, a buyer solicits price offers for a homogeneous product from sellers with heterogeneous costs, and then plays the sellers off one another to obtain additional price concessions. Using experimental methods, we find that transaction prices are statistically indistinguishable in the two institutions with a sufficiently large number of sellers, but that prices are higher in multilateral negotiations than in first-price auctions as the number of sellers decreases. With fewer sellers, the institutions are equally efficient, but with more sellers, there is some evidence that multilateral negotiations are slightly more efficient.

PD September 1999. **TI** The Effect of Asymmetric Entry Costs on Bertrand Competition. **AA** Harvard Law School and Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 228; 600 Pennsylvania Avenue, NW, Washington, DC 20580. Website: bperson@ftc.gov. **PG** 21. **PR** no charge. **JE** D43, L13. **KW** Oligopoly. Entry. Asymmetric Firms. Pricing.

AB By permitting firms to have different entry costs, I generalize two previously studied models of two-stage entry and pricing amongst Bertrand competitors. I find that the existing results depend critically on the symmetry assumption. For example, if firms' entry decisions are observed before price-setting occurs, then total welfare can increase following the introduction of a potential entrant, in contrast to the unambiguous welfare reduction found in the symmetric setting. If firms' entry decisions are unobserved before price-setting

occurs, then the expected price typically decreases or remains unchanged following the introduction of a potential entrant, in contrast to the unambiguous price increase found in the symmetric setting. In both price-setting environments, competition increases following the introduction of potential entrants with sufficiently low entry costs, a finding that is obscured by focusing on the symmetric models.

Thomas, Jonathan

TI Batting Strategy in Limited Overs Cricket. **AU** Preston, Ian; Thomas, Jonathan.

Thomasson, Melissa A.

PD February 2000. **TI** The Importance of Group Coverage: How Tax Policy Shaped U. S. Health Insurance. **AA** Miami University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7543; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 38. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside U.S.). **JE** H20, I18, N82. **KW** Health Insurance. Tax Subsidy. United States. **AB** In 1954, the Internal Revenue Service stipulated that employer contributions to the health insurance plans of their employees were to be excluded from employee taxable income. Today, the tax subsidy is a major feature of the U. S. health care market. This paper examines the initial effects of the tax subsidy on the demand for health insurance using previously unexamined data from 1953 and 1958. Results suggest that the tax subsidy increased the growth of group insurance, particularly among union members and employed persons. This is a critical effect because group insurance is not only less expensive than individual insurance, but it is also easier to obtain, and households with access to group health insurance are far more likely to purchase health insurance coverage than those without similar access. By increasing access to group insurance, the tax subsidy fostered an increase in the purchase of group health insurance by people who may not have purchased individual coverage, and generated institutional change as it cemented an employment-based system of group health insurance in the United States.

Thompson, Aileen J.

PD July 2000. **TI** Import Competition and Market Power: Canadian Evidence. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 232; 600 Pennsylvania Avenue, NW, Washington, DC 20580. Website: bperson@ftc.gov. **PG** 31. **PR** no charge. **JE** F12, F41, L11, L13. **KW** Import Competition. Market Power. Price-Cost Margins. Open Economy. **AB** This paper estimates price-marginal cost mark-ups for Canadian manufacturing industries during the 1970s in order to assess the impact of import competition on domestic market power. The results are mixed. Based on the analysis, there is no consistent evidence that imports have had a beneficial impact on competition in the Canadian market. One possible explanation for this finding is that trade may have differential impacts among firms within industries. Detailed firm-level analysis may therefore provide a more complete understanding of the impact of imports on competition.

Tidball, M.

TI Environmental Liability and Technology Choice: A Duopolistic Analysis. **AU** Mondello, Gerard; Tidball, M.

Tille, Cedric

TI Exchange Rate Pass-Through and the Welfare Effects of the Euro. **AU** Devereux, Michael B.; Engel, Charles; Tille, Cedric.

Tirole, Jean

TI Self-Confidence and Social Interactions. **AU** Benabou, Roland; Tirole, Jean.

TI The Simple Economics of Open Source. **AU** Lerner, Josh; Tirole, Jean.

Tol, Richard S. J.

PD April 2000. **TI** Technology Diffusion and the Stability of Climate Coalitions. **AU** Tol, Richard S. J.; Lise, Wietze; van der Zwaan, Bob. **AA** Tol: IVM-VU. Lise: Vrije Universiteit. van der Zwaan: Vrije Universiteit and Stanford University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/20; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 22. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** Q21, Q28, Q38. **KW** Climate Coalitions. Greenhouse Gases. Technology Diffusion. **AB** Free-riding is a major problem for international climate policy. A country can take advantage of other countries' emission reduction without contributing to abatement policies itself. Game theory suggests that issue linkage may help to overcome free-riding. Earlier studies suggest that if negotiations on greenhouse gas emission reduction are coupled to negotiation on technology transfer, the incentives to cooperate increase. This study confirms that finding. A country has less reason to free-ride if free-riding implies that the countries loses access to desirable, foreign technologies. We also show that, in many cases, it hurts to deny another country access to domestic technologies, if that country retaliates by withholding its technologies. We further show that the losses of withholding abatement technologies are small relative to the gains of free-riding. So, linking greenhouse gas emission reduction with technology diffusion helps to deter free-riding, but only a little bit, and only if the two issues are automatically linked.

Toman, Michael A.

TI Climate Change Policy. **AU** Shogren, Jason; Toman, Michael A.

TI Early Emissions Reduction Programs: An Application to CO2 Policy. **AU** Parry, Ian W. H.; Toman, Michael A.

TI Implementing the Clean Development Mechanism: Lessons from U.S. Private-Sector Participation in Activities Implemented Jointly. **AU** Lile, Ronald; Powell, Mark; Toman, Michael A.

TI Using Environmental Benefit-Cost Analysis to Improve Government Performance. **AU** Farrow, Scott; Toman, Michael A.

TI The Rationale for Flexibility in the Design of Greenhouse Gas Abatement Policies: A Review of Economic Issues. **AU** Anderson, John; Morgenstern, Richard D.;

Toman, Michael A.

Toole, Andrew A.

TI Is Public R&D a Complement or Substitute for Private R&D? A Review of the Econometric Evidence. **AU** David, Paul A.; Hall, Bronwyn H.; Toole, Andrew A.

Tootell, Geoffrey M. B.

TI Is Bank Supervision Central to Central Banking? **AU** Peek, Joe; Rosengren, Eric S.; Tootell, Geoffrey M. B.

TI Does the Federal Reserve Possess An Exploitable Informational Advantage? **AU** Peek, Joe; Rosengren, Eric S.; Tootell, Geoffrey M. B.

Toro, Juan

TI The European Business Cycle. **AU** Artis, Michael J.; Krolzig, Hans-Martin; Toro, Juan.

Torres, Olivier

TI Auctions with Discrete Increments: A Structural Econometric Approach Based on Dominated Strategies. **AU** Jouneau-Sion, Frederic; Torres, Olivier.

Treich, Nicholas

TI Recursive Intergenerational Utility in Global Climate Risk Modeling. **AU** Ha-Duong, Minh; Treich, Nicholas.

Triest, Robert K.

TI Gross Job Flows and Firms. **AU** Schuh, Scott; Triest, Robert K.

TI Job Creation, Job Destruction, and the Real Exchange Rate. **AU** Klein, Michael W.; Schuh, Scott; Triest, Robert K.

Tse, Kin-Ping

TI Transition from Fossil Fuels to Renewable Energy: Evidence from a Dynamic Simulation Model with Endogenous Resource Substitution. **AU** Chakravorty, Ujjayant; Tse, Kin-Ping.

Turrini, Alessandro

TI Trade, Wages, and Superstars. **AU** Manasse, Paolo; Turrini, Alessandro

Turunen-Red, Arja

TI Complementarity, Growth and Trade. **AU** Honkapohja, Seppo; Turunen-Red, Arja

Ulph, David

TI Measuring Income and Measuring Sustainability. **AU** Pemberton, Malcolm; Ulph, David.

TI Technical Progress and the Measurement of National Income. **AU** Pemberton, Malcolm; Ulph, David.

Unal-Kesenci, Deniz

TI The Nature of Specialization Matters for Growth: An Empirical Investigation. **AU** Bensidoun, Isabelle; Gaulier, Guillaume; Unal-Kesenci, Deniz.

TI The French-German Productivity Comparison Revisited: Ten Years after the German Reunification. **AU** Nayman, Laurence; Unal-Kesenci, Deniz.

TI La productivite des industries mediterraneennes (Labour Productivity in Mediterranean Manufacturing Industries). **AU** Chevallier, Agnes; Unal-Kesenci, Deniz.

Usher, Dan

PD August 1998. **TI** Public Provision of Indivisible Private Goods in Short Supply. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 977; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html.

PG 33. **PR** Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. **JE** H42, I31. **KW** Social Rationing, Public Goods.

AB Public provision of private goods is usually analyzed as the displacement of a market, where people can buy as much or as little of a good as they please, with tax financed provision by the government of equal and identical amounts of the good per person. But public provision is not always equal per person because some goods cannot be supplied equally or because the government does not choose to supply goods equally. There may be fewer organs available for transplant than there are people who need them. Doctors and teachers may differ in skill or dedication. Governments may limit total expenditure in circumstances where there is a lower limit to useful expenditure per person.

PD June 1999. **TI** Personal Goods, Efficiency and the Law. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 985; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/papers/abstracts/index.html.

PG 27. **PR** Canada \$3.21; U.S. and Foreign \$3.50 (Canadian); make checks payable to IER. **JE** B41, I39, K11. **KW** Efficiency. Law. Life Expectancy.

AB Personal goods, such as leisure and life expectancy, have no unique market price which is the same for everybody. When personal goods are arguments in the utility function and when everybody's utility function is the same, the valuation of personal goods is higher for rich people than for poor people. Thus, rigidly applied in cost-benefit analysis or in the design of the law, the efficiency criterion places a higher value upon the life of a rich person than upon the life of a poor person.

Vahid, Farshid

TI Predicting the Probability of a Recession with Nonlinear Autoregressive Leading Indicator Models. **AU** Anderson, Heather M.; Vahid, Farshid.

PD March 2001. **TI** The Importance of Common Cyclical Features in VAR Analysis: A Monte Carlo Study. **AU** Vahid, Farshid; Issler, Joao Victor. **AA** Vahid: Monash University. Issler: Getulio Vargas Foundation, Brazil. **SR** Monash Department of Econometrics and Business Statistics Working Paper: 01/02; Department of Econometrics and Business Statistics, Monash University, Clayton, Victoria 3800, Australia. Website: www.buseco.monash.edu.au/Depts/EBS/. **PG** 25. **PR** no charge. **JE** C32, C53. **KW** Reduced Rank Models. Model Selection Criteria. Forecasting. Variance Decomposition.

AB Despite the commonly held belief that aggregate data display short-run comovement, there has been little discussion

about the econometric consequences of this feature of the data. We use exhaustive Monte-Carlo simulations to investigate the importance of restrictions implied by common-cyclical features for estimates and forecasts based on vector autoregressive models. First, we show that the "best" empirical model developed without common cycle restrictions need not nest the "best" model developed with those restrictions. This is due to possible differences in the lag-lengths chosen by model selection criteria for the two alternative models. Second, we show that the costs of ignoring common cyclical features in vector autoregressive modelling can be high, both in terms of forecast accuracy and efficient estimation of variance decomposition coefficients. Third, we find that the Hannan-Quinn criterion performs best among model selection criteria in simultaneously selecting the lag-length and rank of vector autoregressions.

TI Market Architecture and Nonlinear Dynamics of Australian Stock and Futures Indices. **AU** Anderson, Heather M.; Vahid, Farshid.

TI Predicting How People Play Games: A Simple Dynamic Model of Choice. **AU** Sarin, Rajiv; Vahid, Farshid.

Valimaki, Juuso

TI Entry and Vertical Differentiation. **AU** Bergemann, Dirk; Valimaki, Juuso.

Valles, Javier

TI On the Real Effects of Monetary Policy: A Central Banker's View. **AU** Vinals, Jose; Valles, Javier.

van den Berg, Gerard J.

PD October 1999. **TI** The Duration of Unemployment in Russia. **AU** van den Berg, Gerard J.; Grogan, Louise. **AA** van den Berg: Free University of Amsterdam. Grogan: University of Amsterdam. **SR** Centre for Economic Policy Research Discussion Paper: 2268; CEPR, 90- 98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 32. **PR** 5 pounds, \$8 or 8 euros. **JE** J40, J60, P20. **KW** Unemployment Definition. Duration Models. Russia.

AB This paper uses longitudinal survey data to assess factors affecting the duration of unemployment in Russia. Examining four types of marginalized labor force participants, according to International Labor Organization guidelines and survey responses, duration models for each type are estimated. It turns out that the sets of characteristics with the strongest effects on the duration are remarkably similar across the different unemployment definitions and model specifications. Therefore, despite the formidable practical measurement problems, problematic groups of individuals can actually be identified.

van der Zwaan, Bob

TI Technology Diffusion and the Stability of Climate Coalitions. **AU** Tol, Richard S. J.; Lise, Wietze; van der Zwaan, Bob.

Van Houtven, George

TI Benefit Transfer as Preference Calibration. **AU** Smith, V. Kerry; Van Houtven, George; Pattanayak, Subhrendu.

van Oijen, Pieter

TI Privatization, Political Risk and Stock Market Development. **AU** Perotti, Enrico C.; van Oijen, Pieter.

Velasco, Andres

TI Short-Term Capital Flows. **AU** Rodrik, Dani; Velasco, Andres.

Veredas, David

TI Institutional Rigidities and Employment Rigidity in the Italian Large Industrial Firms. **AU** Russo, Giuseppe; Veredas, David.

Vertinsky, Ilan

TI Strategic Trade Policy with Endogenous Choice of Quality and Asymmetric Costs. **AU** Zhou, Dongsheng; Spencer, Barbara J.; Vertinsky, Ilan.

Vesperoni, Esteban

TI Globalization and Firms' Financing Choices: Evidence from Emerging Economies. **AU** Schmukler, Sergio; Vesperoni, Esteban.

Viceira, Luis M.

TI Dynamic Consumption and Portfolio Choice with Stochastic Volatility in Incomplete Markets. **AU** Chacko, George; Viceira, Luis M.

Vieille, Nicolas

TI Blackwell Optimality in Markov Decision Processes with Partial Observation. **AU** Rosenberg, Dinah; Solan, Eilon; Vieille, Nicolas.

TI Uniform Value in Recursive Games. **AU** Solan, Eilon; Vieille, Nicolas.

Vinals, Jose

PD September 1999. **TI** On the Real Effects of Monetary Policy: A Central Banker's View. **AU** Vinals, Jose; Valles, Javier. **AA** Banco de Espana. **SR** Centre for Economic Policy Research Discussion Paper: 2241; CEPR, 90- 98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 48. **PR** 5 pounds, \$8 or 8 euros. **JE** E52, E58. **KW** Monetary Policy. Real Effects. Central Banks.

AB This paper is an attempt to provide an updated assessment of what is known and not known about the impact of monetary policy on the economy and what implications follow for the conduct of monetary policy in today's world. Firstly, the paper discusses the conditions under which monetary policy can be expected to affect the economy, both over the medium term and the short term, and reviews the most policy-relevant empirical results, providing some new evidence. Secondly, the paper analyzes the implications that the empirical regularities have for the practical conduct of monetary policy. The focus is on whether the existence of short-run real effects can and should be exploited by central banks and whether the impact of monetary policy on the economy may be affected by the present circumstances of low rates of inflation and low nominal interest rates.

Violante, Giovanni L.

TI The Nonlinear Dynamics of Output and Unemployment in the U.S. **AU** Altissimo, Filippo; Violante, Giovanni L.

TI Severance Payments in Search Economies with Limited Bonding. **AU** Garibaldi, Pietro; Violante, Giovanni L.

TI General Purpose Technology and Within-Group Wage Inequality. **AU** Aghion, Philippe; Howitt, Peter; Violante, Giovanni L.

TI Deunionization, Technical Change and Inequality. **AU** Acemoglu, Daron; Aghion, Philippe; Violante, Giovanni L.

PD November 2000. **TI** Technological Acceleration, Skill Transferability and the Rise in Residual Inequality. **AA** University College London, IFS and CEPR. **SR** University College London Discussion Papers in Economics: 2000/19; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 32. **PR** 4 pounds or \$8.00. **JE** E24, J24, J31, J64, O33. **KW** Wage Inequality. Skill Transferability. Technological Change. Earnings Instability. Displacement.

AB This paper provides an interpretation for the recent rise in residual wage inequality which is consistent with the empirical observation that a sizeable part of this increase has a transitory nature, a feature that eludes standard models based on ex-ante heterogeneity in ability. In the model an acceleration in the rate of quality-improvement of equipment, like the one observed from the early 70's, reduces workers' capacity to transfer skills from old to new machines. This force generates a rise in the cross-sectional variance of skills, and therefore of wages. Through calibration, the paper shows that this mechanism can account for 30% of the surge in residual inequality in the US economy (or for most of its transitory component). Two key implications of the theory -- faster within job wage growth and larger wage losses upon displacement -- find empirical support in the data.

Vita, Michael G.

PD July 1999. **TI** Regulatory Restrictions on Vertical Integration and Control: The Competitive Impact of Gasoline Divorcement Policies. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 227; 600 Pennsylvania Avenue, NW, Washington, DC 20580. Website: bperson@ftc.gov. **PG** 28. **PR** no charge. **JE** L10, L22, L42, L71, L81. **KW** Gasoline. Vertical Integration. Foreclosure. Competition Policy. Regulation.

AB Gasoline "divorcement" regulations restrict the integration of gasoline refiners and retailers. Theoretically, vertical integration can harm competition, making it possible that divorcement policies could increase welfare; alternatively, these policies may reduce welfare by sacrificing efficiencies. This paper attempts to differentiate between these possibilities by estimating a reduced form equation for the real retail price of unleaded regular gasoline. I find that divorcement regulations raise the price of gasoline by about 2.7 cents per gallon, reducing consumers' surplus by over \$100 million annually. This finding suggests that current proposals to further separate gasoline retailing from refining will be harmful to gasoline consumers.

Vohra, Rakesh

TI Combinatorial Auctions: A Survey. **AU** de Vries, Sven; Vohra, Rakesh.

von Kirchbach, Friedrich

TI A First Assessment of Environment-Related Trade

Barriers. **AU** Fontagne, Lionel; von Kirchbach, Friedrich; Mimouni, Mondher.

Vonortas, Nicholas S.

PD January 2000. **TI** US Policy towards Research Joint Ventures. **AA** The George Washington University and National Technical University of Athens. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/14; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 25. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** L43, L52, O31, O38. **KW** Technology Policy. R&D Co-operation. Research Joint Ventures.

AB The US government has decidedly moved towards encouraging co-operation in research and development (R&D) between firms, universities, and other research institutes since the early 1980s. The Republican Administration in the early 1980s set the stage for a radical shift in market environment affecting business strategy and behavior, including the undertaking of co-operative R&D, by introducing extensive changes in antitrust and intellectual property rights law and enforcement. These changes weakened competition policy and significantly strengthened IPR protection. Moreover, a series of legislative actions created the legal framework for promoting industry-university-government co-operation in science and technology and for allowing industry and universities to benefit financially from the results of research funded by the federal government. The Democratic Administrations in the 1990s further built on this system, largely by pushing forward a series of Programs actively promoting government-industry-university partnerships and trying to "channel" private sector R&D activity in technological areas with potentially widespread economic returns. While many of the specific S&T programs have since been scaled down by Congress, the general policy orientation towards closer collaboration between industry, universities, and government has remained intact.

Waldfoegel, Joel

PD October 1999. **TI** Preference Externalities: An Empirical Study of Who Benefits Whom in Differentiated Product Markets. **AA** University of Pennsylvania and NBER. **SR** National Bureau of Economic Research Working Paper: 7391; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** \$5.00. **JE** D62, J15, L13, L82. **KW** Product Differentiation. Preference Externalities. Radio. Increasing Returns. Oligopoly.

AB Theory predicts that in markets with increasing returns, the number of differentiated products -- and resulting consumer satisfaction -- grows in market size. We document this phenomenon across 246 US radio markets. By a mechanism that we term "preference externalities," an increase in the size of the market brings forth additional products valued by others with similar tastes. But who benefits whom? We examine the patterns of -- and mechanisms for -- preference externalities between black and white and between Hispanic and non-Hispanic radio listeners, and among listeners of different age groups. The patterns are striking: while preference externalities are large and positive within groups, they are small and possibly negative across groups. For example, while black-targeted station entry and the black listening share increase in black population, they are unaffected (or possibly reduced) by the size of the white population. Consequently, small groups

receive less variety from the market. Forces that increase the size of the market, such as emerging satellite and Internet technologies, may increase the satisfaction of individuals whose preferences do not match their fellow local residents'.

Walls, Margaret

TI Policies to Encourage Recycling and "Design for Environment": What to Do When Markets are Missing. **AU** Calcott, Paul; Walls, Margaret.

TI Extended Product Responsibility: An Economic Assessment of Alternative Policies. **AU** Palmer, Karen; Walls, Margaret.

Walsh, John

TI Protecting Their Intellectual Assets: Appropriability Conditions and Why U.S. Manufacturing Firms Patent (or Not). **AU** Cohen, Wesley M.; Nelson, Richard R.; Walsh, John.

Wambach, Achim

PD October 1999. **TI** Competitive Insurance Markets Under Adverse Selection and Capacity Constraints. **AU** Wambach, Achim; Inderst, Roman. **AA** Wambach: University of Munich. Inderst: London School of Economics. **SR** Centre for Economic Policy Research Discussion Paper: 2269; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 28. **PR** 5 pounds, \$8 or 8 euros. **JE** C72, C78, D82, G22. **KW** Insurance Markets. Asymmetric Information. Competitive Equilibrium. Capacity Constraints.

AB Ever since the seminal work by Rothschild and Stiglitz (1976) on competitive insurance markets under adverse selection, the equilibrium-non-existence problem has been one of the major puzzles in insurance economics. This paper extends the original analysis by considering firms that face capacity constraints due to limited capital. Two scenarios are considered: if the demand at any insurer exceeds the capacity, either consumers are rationed, or they are served, but the insurer faces a larger risk of bankruptcy. Thus under mild assumptions, a pure strategy equilibrium exists, where every consumer buys his appropriate Rothschild-Stiglitz contract.

Wand, M. P.

TI Mixed Model-Based Hazard Estimation. **AU** Cai, T.; Hyndman, Rob J.; Wand, M. P.

Wang, Ruqu

TI Signalling by Jump Bidding in Private Value Auctions. **AU** Gunderson, Alan; Wang, Ruqu.

TI More on Phantom Bidding. **AU** Bag, Parimal Kanti; Dinlersoz, Emin Murat; Wang, Ruqu.

Wascher, William

TI Using the EITC to Help Poor Families: New Evidence and a Comparison with the Minimum Wage. **AU** Neumark, David; Wascher, William.

Wegkamp, Marten H.

TI Weighted Minimum Mean-Square Distance from Independence Estimation. **AU** Brown, Donald J.; Wegkamp, Marten H.

Weir, Sharada

PD 2000. **TI** Concealed Preferences: Parental Attitudes to Education and Enrolment Choice in Rural Ethiopia. **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/01; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 33. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** D12, I21, O15. **KW** Ethiopia. Rural Education. Education Choice.

AB Parental attitudes regarding the value of education may determine whether some, none or all school-aged children in a household are enrolled and how much formal education they will eventually complete. To the extent that attitudes are important and can be adequately measured, they should explain household demand for schooling in the absence of constraints. However, the attitudes which people express may be inconsistent with their behavior when faced with schooling choices for their own children. If attitudes do not explain actual enrolment, the causes of this discrepancy must be addressed. This paper attempts to measure attitudes, explain their formation and investigate the role of attitudes in the allocation of human capital. Parental attitudes toward schooling are found generally to be favorable, and differences in attitudes help explain household enrolment decisions. However, attitudes alone cannot account for low enrolment in rural Ethiopia. High direct and opportunity costs of schooling also limit school participation in the face of credit constraints.

PD 2000. **TI** Education Externalities in Rural Ethiopia: Evidence From Average and Stochastic Frontier Production Functions. **AU** Weir, Sharada; Knight, John. **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/04; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. **PG** 27. **PR** 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). **JE** D62, I21, O12, Q12. **KW** Ethiopia. Education. Rural Education.

AB Education will have externality effects in agriculture if, in the course of conducting their own private economic activities, educated farmers raise the productivity of uneducated farmers with whom they come into contact. This paper seeks to determine the potential size and source of such benefits for rural areas of Ethiopia. Average and stochastic frontier production function methodologies are employed to measure productivity and efficiency of farmers. In each case, internal and external returns to schooling are compared. We find that there are substantial and significant externality benefits of education in terms of higher average farm output and a shifting outwards of the production frontier. External benefits of schooling may be several times as high as internal benefits in this regard. However, we are unable to find any evidence of externality benefits to schooling in terms of improvements in technological efficiency in the use of a given technology. This suggests that the source of externalities to schooling is in the adoption and spread of innovations, which shift out the production frontier.

PD 2000. **TI** Adoption and Diffusion of Agricultural Innovations in Ethiopia: The Role of Education. **AU** Weir, Sharada; Knight, John. **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/2000/05; CSAE Publishing, Institute of

Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. PG 22. PR 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). JE D62, I21, O33, Q16. KW Ethiopia. Agricultural Innovations. Education.

AB Schooling has been shown to provide substantial externality benefits by increasing farm output and shifting the production frontier outwards. This paper investigates the role of schooling at the household- and site-levels in the adoption and diffusion of agricultural innovations in rural Ethiopia. We find that household- level education is important to the timing of adoption but less crucial to the question of whether a household has ever adopted fertilizer, i.e., early innovators tend to be educated and to be copied by those who adopt later, obscuring the relationship between education and adoption at the household-level. By contrast, site-level education appears not to affect the timing of an innovation's introduction to the site, but does influence the extent of diffusion. Thus, there are two externality effects: educated farmers are early innovators, providing an example which may be copied by less-educated farmers; and educated farmers are better able to copy those who innovate first, enhancing diffusion of the new technology more widely within the site.

PD 2000. TI Intergenerational Transfers of Human Capital: Evidence on Two Types of Education Externalities. AA CSAE, University of Oxford. SR Centre for the Study of African Economies Working Paper: WPS/2000/15; CSAE Publishing, Institute of Economics and Statistics, Manor Road, Oxford, OX1 3UL, United Kingdom. Website: www.csae.ox.ac.uk/. PG 29. PR 3 pounds/\$5 plus p+p (subscription 55 pounds or \$88). JE D12, I21, O15. KW Human Capital. Education. Sub-Saharan Africa. Ethiopia.

AB Low enrolment and educational wastage are serious problems in sub-Saharan Africa, particularly in rural areas of Ethiopia where participation in formal education is extremely poor. An aspect of both problems is late entry to primary school, which has dire consequences for educational attainment, most notably for girls. This paper provides evidence on the extent of low enrolment and late entry for a sample of rural households and examines the determinants of each. In particular, the importance of parental and neighborhood education are considered. We find that the education of both parents is important to enrolment and starting time. Furthermore, education of women in the neighborhood increases the probability of enrolment. This suggests that there are two types of external benefit of schooling in terms of intergenerational transfers of human capital. Given the large gender bias in enrolments in rural Ethiopia, these findings have important implications for educational policy.

Wernstedt, Kris

PD January 1999. TI Construction Minerals in the Baltimore-Washington Metropolitan Area: A Land Management Analysis. AU Wernstedt, Kris; Cummings, Amy McAbee. AA Wernstedt: Resources for the Future. Cummings: University of Maryland. SR Resources for the Future Discussion Paper: 99/13; 1616 P Street, NW, Washington, DC 20036. Website: www.rff.org. PG 45. PR Foreign: \$15.00 Air Mail; \$8.00 Surface Mail; Domestic: \$10.00 First Class; \$6.00 Book Rate. JE Q24, Q28, Q31, Q38, R52. KW Construction Materials. Aggregates. Land Use Planning. Baltimore- Washington.

AB The patchwork of influences that shape the management of construction mineral resources -- sand, gravel, and crushed stone -- includes statutes, regulations, guidance documents, and court decisions at the federal, state, and local level. Across the Washington-Baltimore metropolitan area, these influences and county experiences with construction minerals range widely. The principal objective in this study is to discuss how counties manage such resources; the level and source of concern of local residents with respect to construction mineral extraction; officials' perceptions about trends in the supply and demand for mineral resources; and the level of interest in protecting mineral resources for future exploitation. The study rests on a review of federal, state, and local documents, detailed case studies of construction mineral management in two counties, and telephone interviews of state and federal officials and local planners.

Whalley, John

TI The Environmental Regime in Developing Countries. AU Jha, Raghendra; Whalley, John.

White, William

TI El Nino, Ice Storms, and the Market for Residential Fuelwood in Eastern Canada and the Northeastern U.S. AU Jagger, Pamela; White, William; Sedjo, Roger A.

Wholey, Douglas

TI Enter at Your Own Risk: HMO Participation and Enrollment in the Medicare Risk Market. AU Abraham, Jean; Arora, Ashish; Gaynor, Martin; Wholey, Douglas.

Wickelgren, Abraham L.

PD August 2000. TI Innovation, Market Structure and the Holdup Problem With Horizontal Product Differentiation. AA Federal Trade Commission. SR Federal Trade Commission Bureau of Economics Working Paper: 233; 600 Pennsylvania Avenue, NW, Washington, DC 20580. Website: bperson@ftc.gov. PG 45. PR no charge. JE D42, D43, L12, L13, O31. KW Innovation. Market Structure. Holdup. Investment Incentives. Bargaining.

AB I analyze the innovation incentives of monopoly and duopoly provision of horizontally differentiated products purchased via bilateral negotiations, integrating the market structure and innovation literature with the holdup literature. Because innovation levels are generally strategic substitutes, under duopoly multiple equilibria are possible. With Nash bargaining, the innovation level under monopoly will always coincide with an innovation level in a duopoly equilibrium. Monopoly innovation incentives can be better or worse than with duopoly. With alternating offer bargaining, the monopolist's local innovation incentives are worse than the duopolists'. It is still possible, however, for monopoly to generate more social welfare than duopoly.

PD December 2000. TI The Effect of Exit on Entry Deterrence Strategies. AA Federal Trade Commission. SR Federal Trade Commission Bureau of Economics Working Paper: 235; 600 Pennsylvania Avenue, NW, Washington, DC 20580. Website: bperson@ftc.gov. PG 37. PR no charge. JE L12, L13. KW Exit. Entry Deterrence. Market Structure. Firm Strategy. Monopoly. AB Recent analyses of entry deterrence strategies have required an incumbent's post-entry output or pricing strategy to

be profit maximizing. However, most papers have continued to assume that either an incumbent can commit not to exit after entry or that exit is never optimal. When there are avoidable fixed costs of operating in any period, however, exit can be the optimal strategy. In this situation, entry deterrence strategies operate very differently than when exit is never optimal. In fact, the possibility of exit can make some, previously effective, strategies completely ineffective while improving the effectiveness of others.

PD June 2001. **TI** Moral Hazard, Mergers, and Market Power. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 239; 600 Pennsylvania Avenue, NW, Washington, DC 20580. Website: bperson@ftc.gov. **PG** 33. **PR** no charge. **JE** D21, D82, L15, L20, L40. **KW** Moral Hazard. Mergers. Market Power. Product Quality. Agency Problems.

AB Most analysis of market power assumes that managers act as perfect agents for the shareholders. This paper relaxes this assumption. When managers of a multiproduct firm must exert unobservable effort to improve product quality, there will be a tension between the optimal incentive scheme for eliminating price competition between the products and creating optimal effort incentives. This makes some intra-firm price competition inevitable. When quality improving effort generates positive spillovers, the optimal amount of price competition can be as great or greater than when the products are under separate ownership. Even when this is not the case, intra-firm price competition can be severe enough that quality adjusted price is lower when the products are under common ownership.

Wild, Gerard

PD October 2001. **TI** Economie de la transition: le dossier (The Economics of Transition: A Survey). **AA** CEPII. **SR** CEPII Working Paper: 2001/08; Centre d'Etudes Prospectives et d'Informations Internationales, 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 93. **PR** no charge. **JE** F00, P00, P29. **KW** Post-Communist Area. Transition. Stabilization Program. Privatization. Western Assistance.

AB The study aims at analyzing the upheavals faced, for more than ten years, by the countries of Central and Eastern Europe and by those of the former Soviet Union, referring to four key elements of the transition towards a market economy: the overall logic of transformation; the economic policies implemented; the privatization process; and the opening of the economies. Two points of view are adopted for each of these questions. On the one hand, the arguments of the prosecution concerning the process and the way it was conducted are taken into account. On the other hand, elements favoring the strategies implemented are examined. Constructed as a brief of an examining magistrate, without any polemical or normative aim, this analysis offers another way to assess the decade of transformation which the post-communist economic area has undergone.

Wilen, James E.

TI Dynamics of Spatial Exploitation: A Metapopulation Approach. **AU** Sanchirico, James N.; Wilen, James E.

TI Marine Reserves: Is There a Free Lunch?
AU Sanchirico, James N.; Wilen, James E.

Wilkie, Simon

TI Optimal Multiproduct Nonlinear Pricing with Correlated Consumer Types. **AU** Spiegel, Yossi; Wilkie, Simon.

Williams McElroy, Susan

TI Teenage Childbearing and Its Life Cycle Consequences: Exploiting a Natural Experiment. **AU** Hotz, V. Joseph; Williams McElroy, Susan; Sanders, Seth G.

Willis, Ken G.

TI Estimating the Benefits of Traffic Calming on Through Routes: A Choice Experiment Approach. **AU** Garrod, Guy D.; Scarpa, Riccardo; Willis, Ken G.

Wilson, Bart J.

TI A Comparison of Auctions and Multilateral Negotiations.
AU Thomas, Charles J.; Wilson, Bart J.

Wilson, John D.

TI Tax Competition and Trade Protection. **AU** Janeba, Eckhard; Wilson, John D.

Witt, Robert

TI Child Care and the Welfare to Work Transition.
AU Lemke, Robert J.; Witte, Ann Dryden; Queralt, Magaly; Witt, Robert.

Witte, Ann Dryden

TI Child Care and the Welfare to Work Transition.
AU Lemke, Robert J.; Witte, Ann Dryden; Queralt, Magaly; Witt, Robert.

Wolf, Holger

TI The Growth Costs of Malaria. **AU** McCarthy, F. Desmond; Wolf, Holger; Wu, Yi.

Wolsey, Laurence A.

TI Dynamic Knapsack Sets and Capacitated Lot-Sizing.
AU Loparic, Marko; Marchand, Hugues; Wolsey, Laurence A.

TI A Branch-and-Cut Algorithm for the Single Commodity Uncapacitated Fixed Charge Network Flow Problem.
AU Ortega, Francisco; Wolsey, Laurence A.

Wu, Yi

TI The Growth Costs of Malaria. **AU** McCarthy, F. Desmond; Wolf, Holger; Wu, Yi.

Wyplosz, Charles

PD March 2000. **TI** Ten Years of Transformation: Macroeconomic Lessons. **AA** GIIS (Graduate Institute of International Studies). **SR** Centre for Economic Policy Research Discussion Paper: 2254; CEPR, 90-98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** not available. **PR** 5 pounds, \$8 or 8 euros. **JE** E42, E62, F31, O52. **KW** Transition. Sequencing. Liberalization. Banking. Exchange Rate Regime.

AB Transition was never going to be easy, even if the long-run outlook is highly promising. Not only was the process itself a major theoretical and policy challenge, but, inevitably, politics and economics were bound to interfere. With some

spectacular exceptions, most countries are now on the right track. With hindsight, the old debate, Big Bang vs. gradualism, is more a question of feasibility even though many of the arguments in favor of Big Bang have now been proven right. Once more inflation has been found to be incompatible with growth and the importance of a good microeconomic structure -- especially an effective banking system -- is confirmed. The choice of an exchange rate regime, another of the early controversies, appears as secondary to the adherence of a strict monetary policy. The decline of the state is both spectacular and puzzling, combining desirable and dangerous features.

TI The International Lender of Last Resort: How Large is Large Enough? **AU** Jeanne, Olivier; Wyplosz, Charles.

PD October 1999. **TI** Towards A More Perfect EMU. **AA** GIIIS (Graduate Institute of International Studies). **SR** Centre for Economic Policy Research Discussion Paper: 2252; CEPR, 90- 98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 44. **PR** 5 pounds, \$8 or 8 euros. **JE** E42, E58, E63. **KW** European Monetary Union (EMU). Policy Coordination. Policy Mix. Accountability. Institution Design.

AB This paper explores the unfinished business of preparing for a harmonious monetary union, "more perfect" than the coarse model set up in the Maastricht and Amsterdam Treaties. To start with, the European Central Bank (ECB) may fear that it has to live up to its stated lexicographic mission for fear of losing credibility in the crucial start-up phase. Next, the ECB will have to re-think its official determination to only care about average European conditions. Some form of "monetary federalism" is needed, and an example is provided, using estimated central bank reaction functions. Finally, the institutional set-up is too unwieldy to deliver a good policy mix and permit adequate accountability. One currency is hardly compatible with eleven governments, twelve Central Bank Governors and twelve Parliaments, each of which would be unwilling to share some power. In particular, governments will have to decide whether to allow competition among national institutions, chiefly labor markets, or whether they will look for collusion to protect the least performing ones.

PD October 1999. **TI** Financial Restraints and Liberalization in Postwar Europe. **AA** GIIIS (Graduate Institute of International Studies). **SR** Centre for Economic Policy Research Discussion Paper: 2253; CEPR, 90- 98 Goswell Road, London EC1V 7RR, United Kingdom. Website: www.cepr.org. **PG** 56. **PR** 5 pounds, \$8 or 8 euros. **JE** E51, E60, F21, G14, G18, G28. **KW** Financial Repression. Liberalization. Banking. Credit Ceilings. Capital Controls.

AB In the real world of less than perfect markets, balancing the benefits and costs of financial liberalization is usually impossible ex ante. Having been slow to liberalize, postwar Europe offers a possible testing ground. Looking at the experience in Belgium, France and Italy, a number of interesting lessons can be learned. There is no discernible growth effect of financial repression in the sample studied here. Credit ceilings do not reduce the volatility or the level of nominal interest rates but they succeed in lowering the average real interest rate level. Capital controls keep interest rates down but increase their volatility. Financial restraints have been used to provide cheap financing of public sector deficits and to support industrial policies, but have undermined fiscal discipline and monetary control. Upon liberalization, the rent

created by financial repression, initially captured by the public sector, did not disappear but shifted towards the personnel.

Xepapadeas, Anastasios

PD December 1999. **TI** Environmental Policy and Firm Behaviour: Abatement Investment and Location Decisions under Uncertainty and Irreversibility. **AA** University of Crete. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 99/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 28. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** L12, Q25, Q28. **KW** Monopoly. Government Policy.

AB The paper explores abatement investment and location responses to environmental policy, which takes the form of emission taxes or tradable emission permits and subsidies against the costs of abatement investment, under uncertainty and irreversibility. Uncertainty is associated with output price, environmental policy parameters, or technological parameters. Irreversibility is related to abatement expenses, and movements to a new location. Uncertainty is modelled by Ito stochastic differential equations, and the problem is analyzed by using optimal stopping methodologies. Continuation intervals during which firms do not engage in abatement investment or relocate and intervals during which firms take the irreversible decision of undertaking abatement expenses or relocating are defined. Free boundaries are characterized for a variety of cases that include output price uncertainty, policy uncertainty expressed both in terms of continuous fluctuations of permit prices and unpredictable policy changes, and combined policy and technological uncertainty. An optimal environmental policy is defined as the combination of policy parameters that makes the free boundary corresponding to the profit maximization problem coincide with the free boundary corresponding to a social optimization problem.

Xie, Danyang

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

Xu, Yexiao

TI Have Individual Stocks Become More Volatile? An Empirical Exploration of Idiosyncratic Risk. **AU** Campbell, John Y.; Lettau, Martin; Malkiel, Burton G.; Xu, Yexiao.

Yan, Jia

TI The Value of "Value Pricing" of Roads: Second-Best Pricing and Product Differentiation. **AU** Small, Kenneth A.; Yan, Jia.

Yogo, Motohiro

TI Does School Quality Matter? Returns to Education and the Characteristics of Schools in South Africa. **AU** Case, Anne; Yogo, Motohiro.

Yuen, Chi-Wa

TI Excessive FDI Flows Under Asymmetric Information. **AU** Razin, Assaf; Sadka, Efraim; Yuen, Chi-Wa.

Yun, John M.

PD January 2001. **TI** Publicity and the Optimal Punitive Damage Multiplier. **AA** Federal Trade Commission.

SR Federal Trade Commission Bureau of Economics Working Paper: 236; 600 Pennsylvania Avenue, NW, Washington, DC 20580. Website: bperson@ftc.gov. **PG** 29. **PR** no charge. **JE** D83, K13, K41. **KW** Punitive Damages. Punitive Multiplier. Tort Reform. Publicity.

AB There are instances when punitive damage awards create publicity. This publicity could influence the behavior of uncompensated victims, which has implications on the optimal punitive damage multiplier. A new adjusted multiplier is derived that incorporates publicity into the analytical framework. Assuming that all victims receive the same punitive award, the result is a lower punitive multiplier relative to the standard result. The extent of the adjustment will depend on the likelihood of publicity, the strength of the publicity, and the number of victims. However, if we allow for heterogeneous punitive awards, then, under certain litigation cost conditions, there is an improvement in efficiency over uniform awards.

Zakoian, Jean-Michel

TI Non Redundancy of High Order Moment Conditions for Efficient GMM Estimation of Weak AR Processes. **AU** Broze, Laurence; Francq, Christian; Zakoian, Jean-Michel.

Zhang, Zhong Xiang

PD January 2000. **TI** Estimating the Size of the Potential Market for the Kyoto Flexibility Mechanisms. **AA** University of Groningen. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 00/08; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 37. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** Q25, Q28, Q43, Q48. **KW** Marginal Abatement Costs. Emissions Trading. Clean Development Mechanism. Joint Implementation. Kyoto Protocol. Greenhouse Gases. European Union. Hot Air. CDM Market. Permit Pricing.

AB The Kyoto Protocol incorporates emissions trading, joint implementation and the clean development mechanism to help Annex I countries meet their Kyoto targets at a lower overall cost. This paper estimates the size of the potential market for all three flexibility mechanisms under the Kyoto Protocol over the first commitment period 2008-2012. The paper estimates the potential demand in the greenhouse gas offset market, provides a quantitative assessment of the implications of the EU proposal and finally, using the 12-region's marginal abatement cost-based model, the paper estimates the contributions of three flexibility mechanisms to meet the total emissions reductions required of Annex I countries under the four trading scenarios respectively. We find that fewer restrictions on trading permits results in greater gains from trading. The Annex I countries that have the highest autarkic marginal abatement costs tend to benefit the most. With respect to developing countries, their net gains are highest when trading in hot air is not allowed, and China and India account for about three-quarters of the total developing countries' exported permits to the Annex I regions.

Zheng, Charles Z.

PD January 2000. **TI** Optimal Auction in a Multidimensional World. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1282; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001

Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 44. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D44, D82, H57, L10. **KW** Auctions. Multidimensional Auctions. Optimal Auctions. Reserve Price.

AB A long-standing unsolved problem is how to design seller-optimal auctions when bidders' private characteristics ("types") differ in many dimensions. This paper solves the problem, assuming bidder-types are stochastically independent across bidders. First, it proves that in any optimal auction, with positive probability, the object is not sold. Thus, a standard auction without a reserve price is not optimal. Second, the paper obtains an explicit formula for optimal auctions in a class of environments. The optimal mechanism is almost equivalent to a Vickrey auction with reserve price, except that the bids are ranked by an optimal scoring rule, which assigns scores to the multidimensional bids. When the hazard rate of a statistic of bidder-types is monotone, this auction is optimal among all mechanisms. When the hazard rate is not monotone, this auction is optimal among all "scoring mechanisms". The author's optimal auction implies that an optimizing seller would not evaluate bids by her own preferences; instead, she would induce downward distortion of nonmonetary provisions from the first-best configuration. Applied to multidimensional nonlinear pricing, the author's design of an optimal auction yields an explicit optimal pricing function.

Zhou, Dongsheng

PD February 2000. **TI** Strategic Trade Policy with Endogenous Choice of Quality and Asymmetric Costs. **AU** Zhou, Dongsheng; Spencer, Barbara J.; Vertinsky, Ilan. **AA** Zhou: City University of Hong Kong. Spencer: University of British Columbia and National Bureau of Economic Research. Vertinsky: University of British Columbia. **SR** National Bureau of Economic Research Working Paper: 7536; Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Website: www.nber.org. **PG** 33. **PR** \$10.00 per copy (plus \$10.00 per order for shipping outside US). **JE** F12, F13. **KW** Trade Competition.

AB This paper examines the strategic trade policy incentives for investment policies toward quality improvements in a vertically differentiated exporting industry. Firms first compete in qualities and then export to a third country market based on Bertrand or Cournot competition. Optimal policies are asymmetric across the two producing countries. Under Bertrand competition, the low-quality country subsidizes investment to raise export quality, while the high-quality country imposes a tax so as to reduce the quality of its already high quality exports. Under Cournot competition, the results are reversed with a tax in the low-quality country and a subsidy in the high-quality country.

Zingales, Luigi

TI The Firm as a Dedicated Hierarchy: A Theory of the Origin and Growth of Firms. **AU** Rajan, Raghuram G.; Zingales, Luigi.